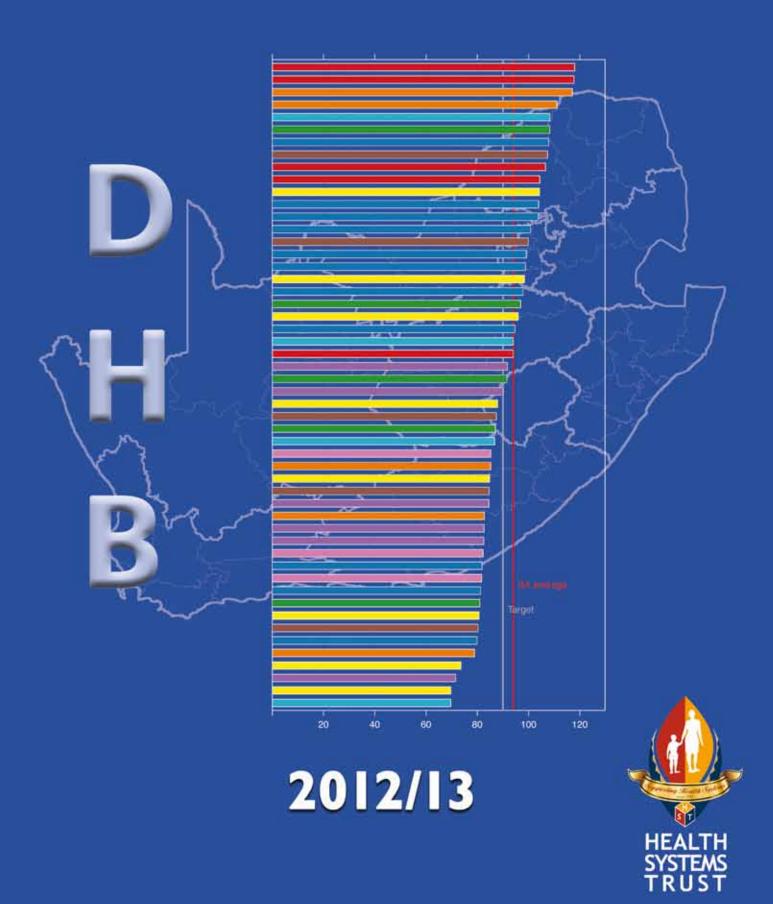
# DISTRICT HEALTH BAROMETER



### **District Health Barometer**

### 2012/13

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**Published by** 



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Our thanks go to the members of the DHB advisory group for their input and advice. The members for the 2012/13 edition include:

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### Disclaimer

The DHB editorial team is conscious of the fact that the correct indigenous spelling of several district names is not used consistently in this edition. This anomaly arises from the need to align DHB content with the names as published in our data source reports.

### **Table of Contents**

List o	f Abb	previations and Acronyms	i		
Forev	vord		ii		
Intro	ducti	on and Overview	iii		
Sectio	on A:	Indicator Comparisons per programme by District	1		
1	Fina	ncial Indicators	1		
	1.1	Provincial and local government expenditure on District Health Services per capita (uninsured)	1		
	1.2	Provincial PHC expenditure per capita (uninsured)	6		
	1.3	Provincial expenditure per PHC headcount	11		
	1.4	Proportion of district health services expenditure on District Management	15		
	1.5	Proportion of district health services expenditure on District Hospitals	15		
	1.6	Proportion of district health services expenditure on PHC	15		
2	Mar	agement PHC	30		
	2.1	PHC supervisor visit rate (fixed clinic/CHC/CDC)	30		
3	Management Inpatients				
	3.1	Average length of stay	35		
	3.2	Inpatient bed utilisation rate	40		
	3.3	Expenditure per patient day equivalent	45		
	3.4	Ratio ambulatory to inpatient days	50		
	3.5	OPD new client not referred rate	55		
4	Delivery				
	4.1	Delivery rate in facility under 18 years	60		
	4.2	Caesarean section rate	65		
	4.3	Stillbirth rate in facility	71		
	4.4	Inpatient early neonatal mortality rate in facility	76		
	4.5	Maternal mortality ratio in facility	81		
5	PMT	CT Indicators	87		
	5.1	Antenatal 1st visit before 20 weeks rate	87		
	5.2	HIV prevalence among antenatal clients tested (survey)	92		
	5.3	Antenatal client initiated on ART rate	99		
	5.4	Early infant HIV diagnosis coverage	104		
	5.5	Proportion of PCR tests HIV-positive for infants under two months of age / Infant 1st PCR test positive around 6 weeks rate (DHIS)	110		
6	Imn	nunisation	115		
	6.1	Immunisation coverage under 1 year	115		
	6.2	Measles 1st to 2nd dose drop-out rate	120		

7	Child Health	124
	7.1 Vitamin A coverage 12 to 59 months	124
	7.2 Child under 5 years diarrhoea with dehydration incidence	129
	7.3 Child under 5 years diarrhoea case fatality rate	135
	7.4 Child under 5 years pneumonia incidence	141
	7.5 Child under 5 years pneumonia case fatality rate	148
	7.6 Child under 5 years severe acute malnutrition incidence	155
	7.7 Child under 5 years severe acute malnutrition case fatality rate	161
8	Reproductive Health	167
	8.1 Couple year protection rate	167
	8.2 Cervical cancer screening coverage	174
9	Tuberculosis	179
	9.1 TB case finding	179
	9.2 TB case finding index	179
	9.3 Incidence of TB	179
	9.4 TB successful treatment rate (all TB)	185
	9.5 TB cure rate (new pulmonary smear-positive)	190
	9.6 TB defaulter rate (new pulmonary smear-positive)	195
10	HIV and AIDS	202
	10.1 Male condom distribution coverage	202
	10.2 Adults remaining on ART at the end of the month – total	207
	10.3 Children under 15 years remaining on ART at end of the month – total	212
Section	on B: National and District Profiles	217
Маро	of 52 districts in South Africa as per 2011 demarcation	219
11	South Africa	220
12	Eastern Cape Province	238
13	Free State Province	263
14	Gauteng Province	281
15	KwaZulu-Natal Province	301
16	Limpopo Province	338
17	Mpumalanga Province	353
18	Northern Cape Province	365
19	North West Province	382
20	Western Cape Province	396
Appe	ndix 1: Definitions and Sources	416

Appendix 1: Definitions and Sources

### List of Abbreviations and Acronyms

AIDS	Acquired Immune Deficiency Syndrome	LG	Local Government
ALOS	Average Length Of Stay	LP	Limpopo
ANC	Antenatal Care	LTFU	Lost to Follow-up
APP	Annual Performance Plan	MNCWH	Maternal, Newborn, Child and Women's Health
ART	Antiretroviral Therapy	MDG	Millennium Development Goal
BANC	Basic Antenatal Care	MMR	Maternal Mortality Ratio
BAS	Basic Accounting System	MP	Mpumalanga
BCG	Bacille Calmette-Guérin (vaccine)	MTCT	Mother-to-Child Transmission
BUR	Bed Utilisation Rate	NC	Northern Cape
CDC	Community Day Centre	NCCEMD	National Committee on Confidential Enquiries
C-section	Caesarean section	NDoH	into Maternal Deaths
CARMMA	Campaign on Accelerated Reduction of Maternal	NHLS	National Department of Health
	and Child Mortality in Africa		National Health Laboratory Service
CD4	Cluster of Differentiation 4	NIDS	National Indicator Data Set
CHC	Community Health Centre	NIMART	Nurse-Initiated Management of ART
CI	Confidence Interval	NSDA	Negotiated Service Delivery Agreement
CMS	Council for Medical Schemes	NSP	National Strategic Plan
CPIX	Consumer Price Index	NT	National Treasury
CS	Community Survey	NW	North West
DHB	District Health Barometer	NVP	Nevirapine
DHIS	District Health Information System	OPD	Outpatient Department
DI	Deprivation Index	OPV	Oral Polio Vaccine
DM	District Municipality	PCE	Per Capita Expenditure
DNA	Deoxyribonucleic Acid	PCR	Polymerase Chain Reaction
EC	Eastern Cape	PDE	Patient Day Equivalent
EID	Early Infant Diagnosis	PHC	Primary Health Care
ETR.Net	Electronic Tuberculosis Register	PPIP	Perinatal Problem Identification Programme
FS	Free State	PMTCT	Prevention of Mother-to-Child Transmission of HIV
GHS	General Household Survey	PTB	Pulmonary Tuberculosis
GIS	Geographic Information System	RV	Rotavirus
		SBR	Stillbirth Rate
GP	Gauteng	SEQ	Socio-economic Quintile
HAART	Highly Active Antiretroviral Treatment	Stats SA	Statistics South Africa
НСТ	HIV Counselling and Testing	STI	Sexually Transmitted Infection
Нер В	Hepatitis B	ТВ	Tuberculosis
HIV	Human Immunodeficiency Virus	WC	Western Cape
IUCD	Intra-uterine Copper Device	WHO	World Health Organization
KZN	KwaZulu-Natal		



The District Health Barometer (DHB) is an annual overview of public health services in South Africa which has become an important planning and management resource for health service providers, managers, researchers and policy-makers in the country. The key objective of the DHB is to provide reliable and credible information that can be used to inform the development of District Health Plans and the National Department of Health's Annual Performance Plan. In order to ensure that the Barometer is timely and relevant, the DHB staff have worked tirelessly to ensure that this year's edition is ready for dissemination before the process of developing District Health Plans commences.

The DHB provides information that is disaggregated to district level and gives districts current information on their functioning and progress over time in relation to previous years as well as other districts. Each edition highlights problem areas and data quality issues, but also highlights areas of sustained and dramatic progress. Moreover, the DHB highlights areas that require deeper research to identify the underlying issues contributing to the indicator values and trends.

Data feeding into the publication are drawn from a range of sources including the District Health Information System (DHIS), Statistics SA, the Electronic TB Register (ETR.Net) and National Treasury.

Now in its eighth edition, the DHB includes 42 indicators with trend illustrations and profiles of South Africa, the nine provinces and the 52 districts.

Research conducted with end-users of the DHB has attested to the usefulness of the publication in their planning processes.

We urge health service providers, managers, researchers and policy-makers to make use of this valuable information to improve the services provided to the South African population. The information available in this and future DHB publications will also assist users in improving the quality of data and information relating to public health services.

We invite commentary and feedback that will facilitate further improvement and enhance the benefits of future editions of the DHB.

Dr. Themba L. Moeti Chief Executive Officer Health Systems Trust

### **Introduction and Overview**

### Background

The District Health Barometer (DHB) provides an overview of the delivery of primary health care (PHC) in the public health sector across the provinces and districts in South Africa. The DHB has been issued every year since 2005, and draws data from the District Health Information System (DHIS), Statistics SA, the National HIV and Syphilis Antenatal Sero-prevalence Survey, the National Health Laboratory Service (NHLS), the National Treasury (BAS data) and the national Electronic Tuberculosis (TB) Register (ETR.Net). The publication seeks to highlight inequities in health outcomes, health resource allocation and delivery, and to track the efficiency of health processes across all provinces and districts.

Compilation of the DHB is guided by an advisory committee made up of managers from the National Department of Health (NDoH), as well as health experts.

The timely publication of the DHB is inextricably linked to the availability of the resources from which it draws the relevant data.

The DHB is available at http://www.hst.org.za and on CD from Health Systems Trust.

### **Methodology and Data Sources**

### Indicators used in the 2012/13 DHB

The indicators<sup>a</sup> in this DHB have been approved by the NDoH. The chosen indicators are those linked to measuring the Millennium Development Goals, the NDoH's Annual Performance Plan, the District Health Plans of the health districts and those that measure important aspects of the burden of disease. All the indicators in this publication are categorised according to the 2013 National Indicator Data Set (NIDS) and the indicator names are also, where applicable, replicated from the NIDS.

This year, several new indicators have been added. These are:

- OPD new client not referred rate
- Ratio ambulatory to inpatient days
- Child under 5 years diarrhoea with dehydration incidence
- Child under 5 years diarrhoea case fatality rate
- Child under 5 years pneumonia incidence
- Child under 5 years pneumonia case fatality rate
- Child under 5 years severe acute malnutrition incidence
- Child under 5 years severe acute malnutrition case fatality rate
- TB case finding (new pulmonary TB smear-positive)
- TB case finding index
- Incidence of TB new pulmonary TB smear-positive
- Incidence of TB all types
- TB successful treatment rate (all TB)
- Adult remaining on ART at end of the month total
- Child under 15 years remaining on ART at end of the month total

The TB indicators for defaulter and cure rates focus only on new smear-positive pulmonary TB cases. More detailed spreadsheets, including all the categories of case finding and treatment outcomes, are included on the CD.

Some indicators reported on in previous years have been dropped, namely:

- Usable beds per 1 000 uninsured population
- Utilisation rate PHC
- Utilisation rate under 5 years PHC
- Facility under-1 mortality rate

a A table with definitions, references and terms for each indicator used in this report is available in Appendix 1.

- Facility under-5 mortality rate
- Baby initiated on HAART under 18 months rate
- Mental health case load
- TB two-month smear conversion rate.

Burden of disease indicators could not be updated for this edition of the DHB as the 2010 data were not available from Stats SA in time for inclusion.

Most of the indicators in this report, excluding the socio-economic, financial and certain prevention of mother-to-child transmission (PMTCT) and TB indicators, were updated from the DHIS data files at facility level (NDoH5) for the financial years ending March, up to 2012/13, received in June 2013. Data for the selected indicators were exported into a single MySQL database to facilitate uniform coding of districts and trend analysis across the entire period (2000/01 to 2012/13). As in previous reports, data for selected indicators are given for **district hospitals** only. These are average length of stay, bed utilisation rate, Caesarean section rate, OPD new client not referred rate, ratio ambulatory to inpatient days, and expenditure per patient day equivalent.

### **PMTCT indicators**

Gaps in the completeness of the DHIS data affect national averages, interpretation, analysis and trends for the NIDS indicator Baby PCR test positive around 6 weeks rate. This indicator has been compared with another indicator, namely proportion of PCR tests HIV positive for infants under two months of age. Several sources of data have been assessed for the number of PCR tests: DHIS data, PMTCT surveys and data from the NHLS, which performs infant PCR testing for the public health service.

The NHLS indicator on the proportion of PCR tests HIV positive for infants under two months of age has been calculated as the proportion of **valid** tests in infants under two months that are **positive**, i.e. positive tests/(positive + negative tests). Tests with equivocal results or unsuitable or insufficient specimens were excluded from the denominator. This change in methodology has been applied retrospectively to all the data presented for this indicator. KwaZulu-Natal Province continues to have extremely high rates of missed diagnostic opportunities, with 9.8% of all PCR tests under 2 months not having a clear result in 2012/13.

For the NHLS indicator on early infant HIV diagnosis coverage, the methodology was adjusted this year to align with the monthly reports issued by the NHLS and applied retrospectively to all the data reported in this edition. The estimated number of HIV-exposed infants in need of PCR testing (denominator) was calculated from Stats SA recorded live births multiplied by HIV prevalence (Antenatal Survey). There are some substantial differences in the number of live births at district level reported by the DHIS compared to Stats SA, and therefore there will be differences in coverage estimates reported in this DHB.

### **District health financing indicators**

Provincial health expenditure from 2005/06 to 2012/13 was extracted from the National Treasury Basic Accounting System (BAS) database. All expenditure allocated to specific health facilities was coded to the latest DHIS facility information, and based on this, coded to districts. All other expenditure that could not be clearly allocated to a specific district was allocated to each district in proportion to the population share of the areas involved. For example, provincial-level expenditure is allocated to each of the districts in the province. Expenditure for areas recorded according to the old boundaries (such as DC12 prior to 2011) was split into the current DC12 and BUF according to the population share of those two districts.

Provincial expenditure was coded according to the programmes and sub-programmes published by the National Treasury. Expenditure from sub-programmes 2.2–2.7 (community health clinics, community health centres, community-based services, other community services, HIV and nutrition) constitutes the non-hospital PHC expenditure under District Health Services. Total DHS expenditure includes all sub-programmes under Programme 2: District Health Services, excluding sub-programme 2.8 (Coroner services).

Additional data sources used include:

- Data on local government expenditure on primary health care from the National Treasury. Net expenditure was used, i.e. expenditure less revenue (which includes transfers from provinces to local government).
- Factors for inflation adjustments based on CPIX were obtained from National Treasury to convert expenditure for all years to real 2012/13 prices.
- Medical scheme coverage from the Stats SA General Household Surveys (GHS) was used to calculate the uninsured population. The GHS is the only source of district-level estimates of medical scheme coverage, but these were available only for 2005 to 2007 and there were some anomalies in the data in that period. Over time, reliable extrapolation of coverage at district level, in addition to adjusting for the change in boundaries, has thus become

difficult. Looking retrospectively to 2001, it is clear that overall the GHS and the Council for Medical Schemes (CMS) data correlate, although in some years the GHS deviates substantially. Overall, the level has also remained remarkably static at around  $16\% \pm 1\%$ . Therefore, for the purpose of this analysis, it was considered adequate to apply a single-year estimate of medical scheme coverage to the time series population, since the variation in coverage *between* districts is more relevant than changes in coverage over time. The year 2009 was chosen as the most recent year when the overall rate in GHS was comparable with CMS and historical trends. This estimate uses the pooled 2005 to 2007 district-level estimates, adjusted according to the change in provincial coverage between the two periods (for example, where GP and WC were clearly under-reported in 2005 to 2007). Estimates for districts affected by boundary changes were made by distributing beneficiaries within each province according to expected patterns for metro/non-metro districts and the socio-economic quintile of the districts and constituent local municipalities.

• Data on health facilities, population, patient day equivalents and PHC headcount from the DHIS.

Per capita expenditure indicators use public sector expenditure divided by the uninsured population. It is noted, however, that the GHS and other sources indicate that there is significant use of the private sector by the uninsured population and also some use of the public sector by the insured population. As such, it is acknowledged that there is a wide range of uncertainty surrounding the true size of the population that is dependent on the public sector and this will affect the accuracy of the per capita expenditure indicators.

Net local government expenditure on health services was added to provincial expenditure on district health services.

All the figures have been adjusted to take the effect of inflation into account and are presented in real 2012/13 prices. This means that increases in expenditure over time reflect greater availability of resources rather than merely increases to cover the increasing cost of health care due to inflation.

### **Population data**

Indicators that require population denominators use the mid-year population estimates for the relevant year that were available at the time of calculation. The district population estimates developed by the NDoH for 2001 to 2016 (based on the best available information from the Census 2001 and mid-year estimates) are used in this DHB. These are the same population estimates currently included in the DHIS. Population estimates from Census 2011 are dramatically different to this time series, particularly in some districts and for certain age categories such as infants under one year of age. Key health service delivery indicators such as immunisation coverage have therefore also been calculated using the Census 2011 figures to illustrate the impact of the variation in the denominator on performance.

#### Deprivation index and socio-economic quintiles

The deprivation index is a measure of relative deprivation across districts within South Africa. As with any index, the deprivation index is a composite measure derived from a set of variables.<sup>b</sup>

Variables included in the analysis are considered to be indicators of material and social deprivation. The deprivation indices for this report were generated using Stats SA's GHS data and the 2007 Community Survey (CS).

Each district was ranked according to levels of deprivation and categorised into socio-economic quintiles (SEQ). Districts that fall into quintile 1 (lowest quintile) are the most deprived districts. Those that fall into quintile 5 are the least deprived (best-off).

No new district-level data for the deprivation index have been collected since 2007, so the socio-economic quintiles from 2007 have been used for each of the years thereafter to enable ongoing analysis of equity according to socio-economic status.

Therefore, for this DHB, it has been assumed that there is no change in the SEQ over time and the same quintiles have been assumed since 2007, although this assumption becomes increasingly uncertain.

The old data are also available only by the 2006 to 2010 boundaries, and assumptions were made in order to approximate the SEQ for districts with changed boundaries, as described in the DHB 2011/12.

Work is underway to update the index and quintiles based on the Census 2011; however, this information was not available in time for inclusion in this DHB.

b The deprivation index used in the DHB is generated using principal components analysis which identifies the underlying process that has the most influence in determining the outcome of each variable included in the analysis. Each variable is weighted based on its linear association with the underlying process. The weighted variables are then used to construct the deprivation index.

### **Maternal deaths**

In the case of the number of maternal deaths from confidential enquiries, the data were reported according to the old boundaries and were redistributed based on assumptions reported in the 2011/12 DHB to enable alignment with the 2011 boundaries.

- Using the DHIS data for Buffalo City (BUF) and Amathole (DC12) for 2008/09 to 2011/12 (which appears relatively consistent and complete), the proportion of maternal deaths in each local municipality was calculated and used to split the NCCEMD data for the old Amathole (same code of DC12) into the new districts, BUF and DC12 (new boundaries).
- All maternal deaths in Motheo (DC17) were allocated to Mangaung (MAN). Looking at the DHIS data per local municipality for 2008/09 to 2011/12, it appears that a small number of deaths would have occurred in Mantsopa LM (FS196, previously FS173) but no adjustment was made due to the relatively small proportion.
- All maternal deaths in Metsweding (DC46) were added to Tshwane MM (TSH).
- Approximately 15 deaths in OR Tambo DM (DC15) (Mbizana LM and Ntabankulu LM, old EC151, EC152 now EC443 and EC444) would probably move from DC15 to Alfred Nzo DM (DC44) with the change in boundaries. The Western Cape data on maternal deaths are not in the DHIS due to an issue with linking the correct data element names. Data were obtained from Sinjani<sup>c</sup> and imported into the DHIS.

### HIV prevalence among antenatal clients tested (survey)

The ANC survey results for 2001 to 2010 were obtained according to the new boundaries in August 2012. The prevalence rates and confidence intervals (CI) were calculated at district and provincial level for all years, even though the sample size prior to 2006 was not large enough for district-level outcomes. For the 95% CI, the normal approximation to the binomial distribution was used. Where n\*p or n\*(1-p) was <5, the Mid-P exact test of OpenEpi was used.<sup>d</sup>

The national prevalence rates were taken from the Antenatal Sero-Prevalence Survey reports, since these are calculated using weights for the number of women aged 15 to 49 years in each province, and these weights were not available to us. Since 2011, the survey results have been reported according to the current demarcation and were therefore taken directly from the published report.

### **District boundaries and maps**

Geographic information from the Municipal Demarcation Board is used to define district and provincial boundaries and is the same as is followed by the DHIS. Indicators in this DHB have been aggregated and presented according to the boundaries that came into effect in May 2011.

### **Averages**

All averages (provincial and national) are **weighted averages**, based on the total numerator and denominator for all the sub-areas included, and are thus not averages of *the district indicator values*. These averages may appear 'skewed' for any indicator in any province where there are districts of very different sizes or workloads, and where a bigger district has a very different value from the other smaller districts in a province.

### Data display

### Financial year and calendar year

The indicators from DHIS and the BAS financial system cover the 12 months April to March, which is the financial year of the Department of Health. Indicators for financial years are annotated as 2012/13 or FY 2013. Other sources, such as the TB data from ETR.Net, cover a calendar year. Data from the Antenatal HIV Sero-prevalence Survey and Stats SA surveys derive from the period of the survey. In the Excel file produced with the DHB, the single year indicated for summary purposes is the one including the majority of the data.

c Sinjani is the equivalent of the DHIS used only in the Western Cape Province.

d http://www.openepi.com/OE2.3/Menu/OpenEpiMenu.htm n= number tested, p = proportion positive.

#### Indicator ranking - is first always best?

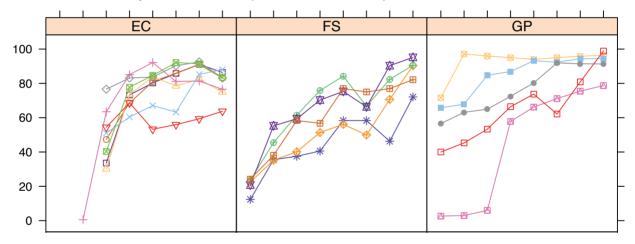
The districts are ranked from 1 to 52 (for the various indicators in the league table graphs where number 1 represents the best performance and number 52 the worst performance). However, with some indicators such as Caesarean section rate and expenditure, an indicator in the number 1 position does not mean best performance; 'best' is usually in the middle range close to the South African average. For these indicators, their order from top to bottom should therefore not necessarily be considered as best to worst.

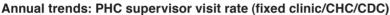
In the DHB data file, the indicator ranks for all districts are coloured from green to orange to red. It must be noted that this is only a crude indication of performance and is based on the position of a district *relative* to the other 51 districts and not to a target or fixed standard. Therefore, it is possible that an indicator may improve in a district, but it could drop in rank (i.e. go from green to red) if other districts have improved to a greater extent.

ArcView was used for generating the thematic or choropleth maps of indicator values by district. All of the maps were created using 'natural breaks'<sup>e</sup> with five categories as the default. For all indicators, low indicator values are represented by light shades and high indicator values by darker shades, regardless of whether high values are 'best' or 'worst'. Thus, dark shades are not always best, and each indicator map should be interpreted in terms of the desired target range for that indicator.

#### **Trends**

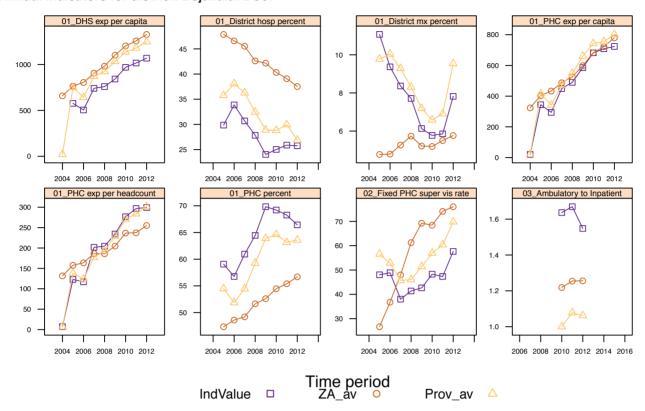
Annual trends of an indicator comparing districts and provinces are included in some chapters in section A. Indicator comparisons by district help the reader to explore how an indicator varies over a number of years across districts and provinces. As the scale of the *y* axis is the same for all the graphs, one can easily notice differences. This also shows variation and change within the districts in a particular province over time, as depicted below.





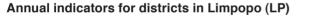
e This is the default classification method in ArcView, using the Jenks Optimisation algorithm to group values within a class, resulting in classes of similar values separated by breakpoints. This method works well with data that are not evenly distributed and not heavily skewed towards one end of the distribution.

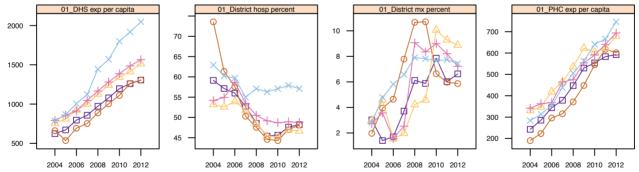
In section B of the report, there are composite graphs showing annual trends for all districts for all the indicators included in the DHB. The district indicator value (IndValue) is shown together with the relevant provincial (Prov\_av) and national averages (ZA\_av) (see legend below).



Annual indicators for district: Bojanala: DC37

There are also composite graphs showing annual trends for all districts within each province.





The CD also includes many other graphs showing annual and monthly trends by indicator, by province and by individual district. The monthly graphs have been created with R statistics software and also have a loess regression line to help discern the trends.

### **Section A:**

### **Indicator Comparisons per programme by District**

### **1** Financial Indicators

### Nerisha Tathiah

### 1.1 Provincial and local government expenditure on District Health Services per capita (uninsured)

The provincial and local government expenditure on District Health Services per capita (uninsured) refers to the total amount of money spent on district health services (DHS) per person without medical scheme coverage. The indicator includes the provincial expenditure on district health services (excluding Programme 2.8 Coroner services), and the net local government expenditure on primary health care (PHC).

Nationally, expenditure per capita has increased over eight years in real terms<sup>a</sup> from R659 in 2004/05 to R1 327 in 2012/13. At provincial level, Gauteng (R1 199) and Free State (R1 207) have the lowest expenditure per capita. KwaZulu-Natal (R1 301) and North West (R1 247) also fall below the national average. Limpopo spent the most per capita (R1 501). This translates into an absolute difference of R302 between the highest and lowest provinces and a range ratio of 1.3:1.

From a district perspective, Central Karoo in Western Cape Province spent the most per capita (R2 627), and Amajuba in KwaZulu-Natal spent the least (R796). The absolute difference between the highest and lowest expenditure per capita by districts was R1 832, resulting in a range ratio of 3.3:1 between the highest and lowest districs. This indicates that interdistrict inequity remains relatively high when compared to inter-province inequities (Figure 1).

There has been a steady, consistent trend of increased DHS expenditure per capita over the past eight years in real terms in all but the two districts of Amajuba (KZN) and Siyanda (NC). Examples of this growth in expenditure per capita include Central Karoo (WC), which increased by 12.8% compound annual growth since 2008/09, and Ekurhuleni (Gauteng Province), which increased by 22.0% per year over the past five years, but from a lower base (Figure 4).

Among the National Health Insurance (NHI) districts, Umzinyathi and Amajuba, both from KwaZulu-Natal, had the highest (R1 951) and lowest (R796) expenditures respectively (Figure 2).

2012/13				lees per capit	a (annsaic	a) by district,
			1		<u> </u>	(
Central Karoo: DC5	2627		1			
Namakwa: DC6	2193					
Waterberg: DC36	2048					
Umzinyathi: DC24	1951					
Joe Gqabi: DC14	1924					
Cacadu: DC10	1906					
RS Mompati: DC39	1753					
Umkhanyakude: DC27	1722					
West Coast: DC1	1699					
G Sibande: DC30	1665					
Pixley ka Seme: DC7	1661					
C Hani: DC13	1633					
Mangaung: MAN	1583					
Zululand: DC26	1570					
Vhembe: DC34	1566					
N Mandela Bay: NMA	1557					
Sisonke: DC43	1526					
Mopani: DC33	1514					
Overberg: DC3	1514					
Tshwane: TSH	1507					
Amathole: DC12	1481					
Eden: DC4	1447					
NM Molema: DC38	1439					Provinces
Ugu: DC21	1432					EC FS
JT Gaetsewe: DC45	1416					FS
Ehlanzeni: DC32	1413					GP KZN
Cape Town: CPT	1389					LP
West Rand: DC48	1384					MP NC
Xhariep: DC16	1354					NW 📃
Uthungulu: DC28	1352		7			WC
Gr Sekhukhune: DC47	1307					
Capricorn: DC35	1306					
uMgungundlovu: DC22	1299					
Fezile Dabi: DC20	1273					
Frances Baard: DC9	1251					
Sedibeng: DC42	1243					
Nkangala: DC31	1206					
iLembe: DC29	1193					
Buffalo City: BUF	1172					
OR Tambo: DC15	1116					
Cape Winelands: DC2	1113					
A Nzo: DC44	1108		SA average			
eThekwini: ETH	1091					
Bojanala: DC37	1069					
Ekurhuleni: EKU	1066					
Uthukela: DC23	1052					
Johannesburg: JHB	1047					
Lejweleputswa: DC18	1028					
T Mofutsanyane: DC19 Dr K Kaunda: DC40	1020					
	1010					
Siyanda: DC8	819 796					
Amajuba: DC25			1			I
	500	1000	1500	2000 2	2500	
		010/10 price				

Figure 1: Provincial and LG expenditure on District Health Services per capita (uninsured) by district, 2012/13

Rand (real 2012/13 prices) [Source: BAS, DHIS, Stats SA]

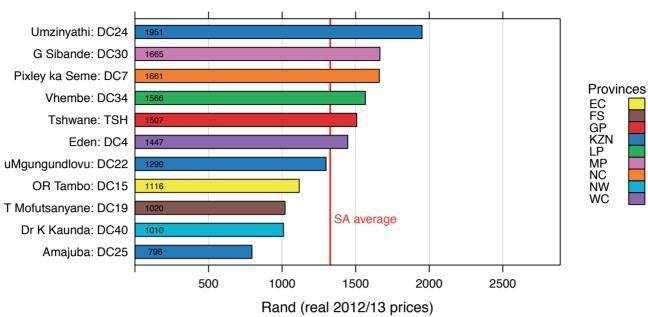
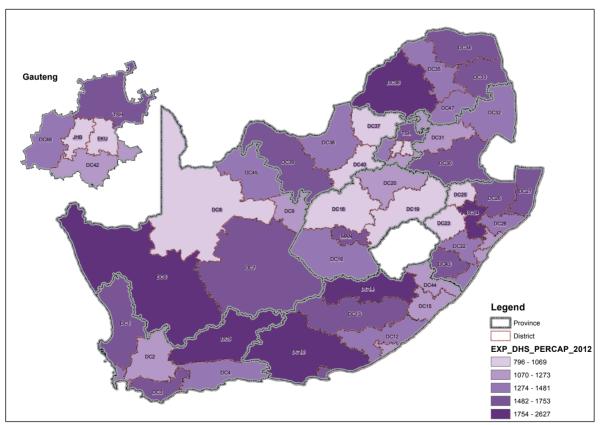
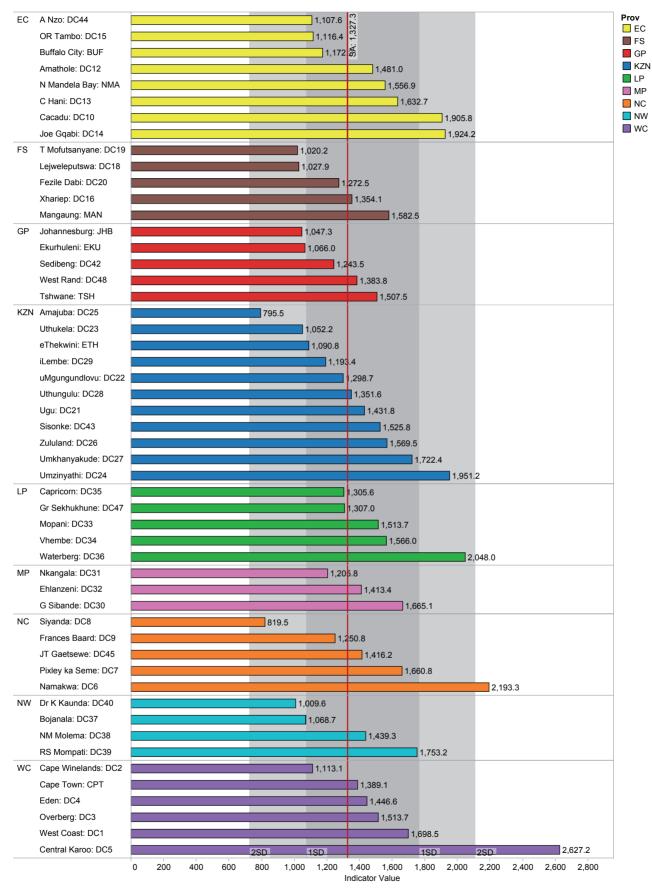


Figure 2: Provincial and LG expenditure on District Health Services per capita (uninsured) by NHI district, 2012/13

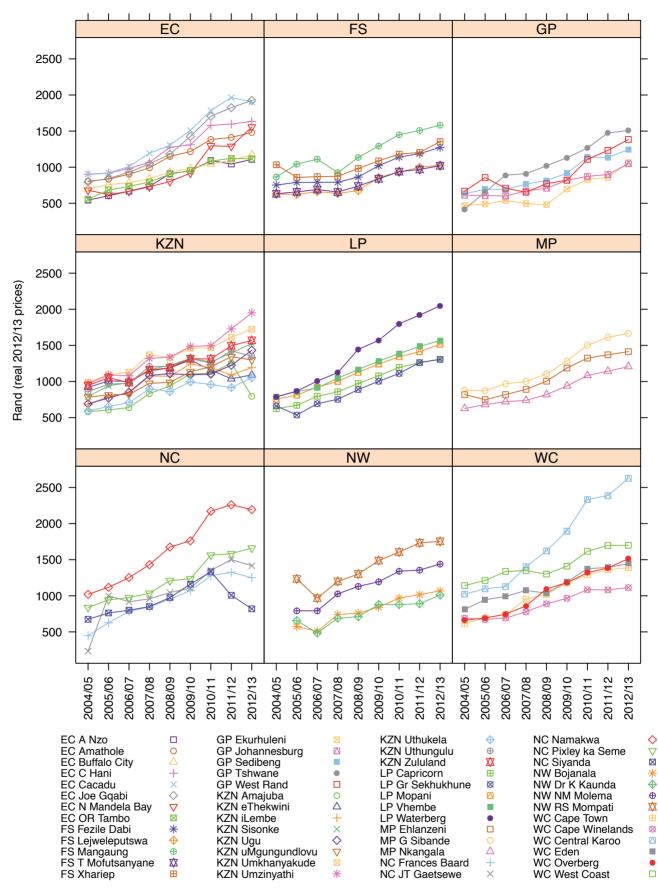
Map 1: Provincial and LG expenditure on District Health Services per capita (uninsured) by district, 2012/13



### Figure 3: Provincial and LG expenditure on District Health Services per capita (uninsured) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Rand (real 2012/13 prices) Source: BAS, DHIS, Stats SA





### 1.2 Provincial PHC expenditure per capita (uninsured)

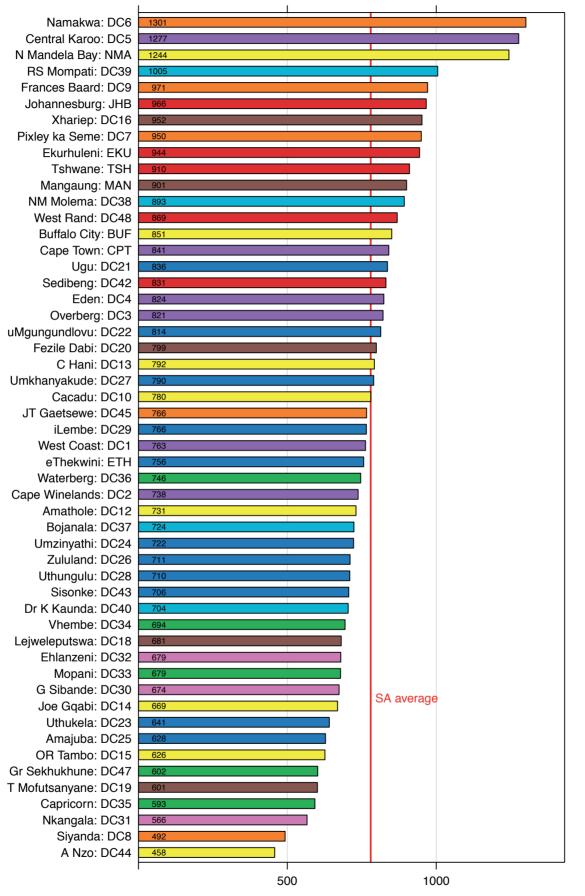
The provincial PHC expenditure per capita (uninsured) refers to the total amount spent on non-hospital PHC health services per person without medical scheme coverage. This includes provincial expenditure on sub-programmes 2.2-2.7 of DHS (clinics, community health centres, community-based services and other community services, nutrition and HIV) plus net local government expenditure on PHC.

In real terms, expenditure increased nationally over eight years from R324 in 2004/05 to R780 in 2012/13. Provincially, Gauteng had the highest expenditure at R928, and Mpumalanga had the lowest at R643, giving a provincial range of R286, and a range ratio of 1.4:1.

From a district perspective, the highest spending district was Namakwa (NC), at R1 301, and the lowest spending district was Alfred Nzo (Eastern Cape), at R458. The district range was R843, with a range ratio of 2.8:1 (Figure 5).

The intra-provincial inequity in some provinces, such as the Eastern and Northern Cape, is greater than inter-provincial inequities. The most rapid average annual growth in PHC expenditure per capita over the past five years has occurred in West Rand – 25% (GP), Ekurhuleni – 23% (GP) and Nelson Mandela Bay – 22% (EC).

Among the NHI districts, Pixley ka Seme (NC) had the highest expenditure (R950), and Thabo Mofutsanyane (FS) had the lowest expenditure (R601) (Figure 6).



#### Figure 5: Provincial PHC expenditure per capita (uninsured) by district, 2012/13

Rand (real 2012/13 prices) [Source: BAS, DHIS, Stats SA]

Provinces

EC FS GP

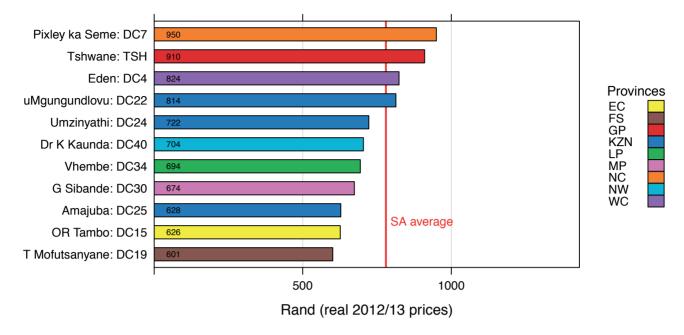
KZN LP

MP

NC

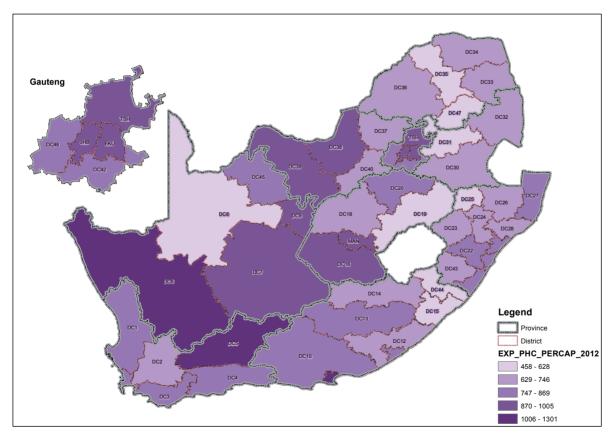
NW

WC

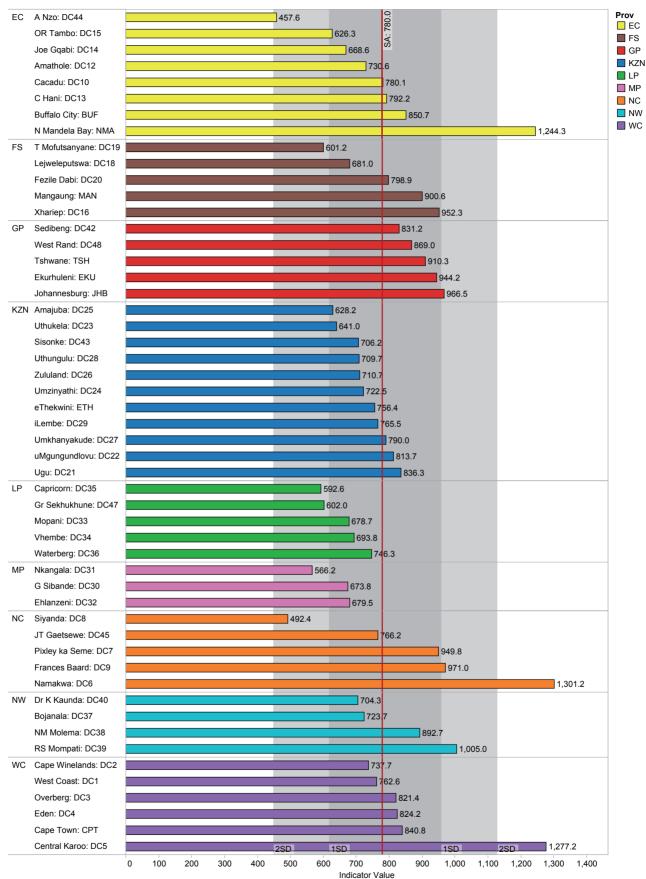


#### Figure 6: Provincial PHC expenditure per capita (uninsured) by NHI district, 2012/13

### Map 2: Provincial PHC expenditure per capita (uninsured) by district, 2012/13

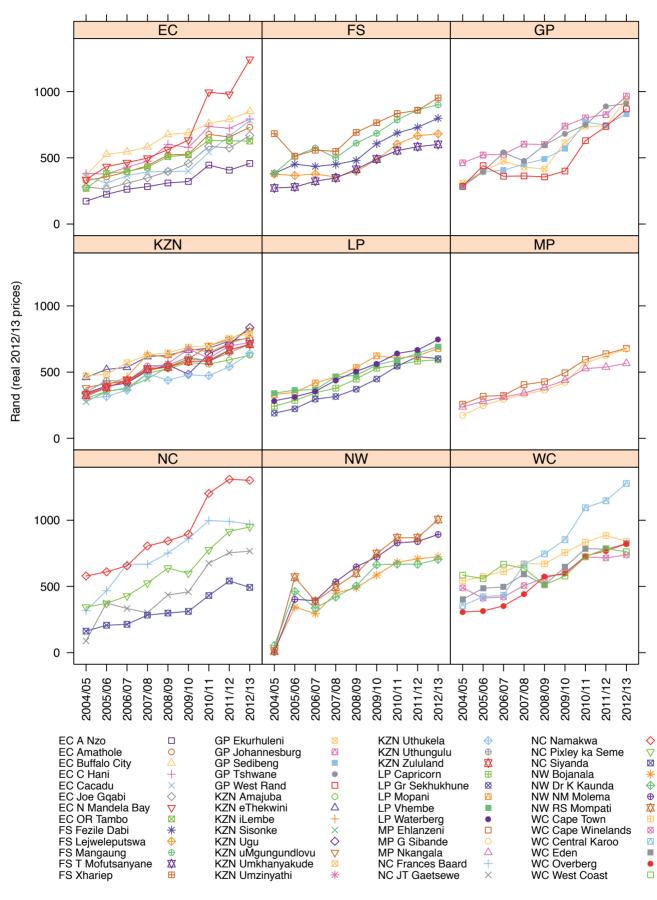


### Figure 7: Provincial PHC expenditure per capita (uninsured) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Rand (real 2012/13 prices) Source: BAS, DHIS, Stats SA





### 1.3 Provincial expenditure per PHC headcount

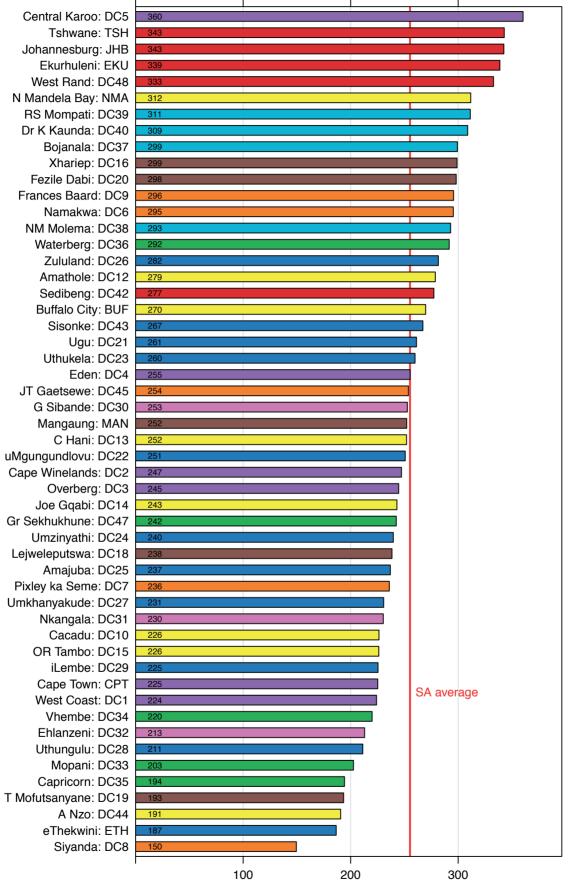
The expenditure per PHC headcount refers to the amount of money spent by provinces on non-hospital PHC<sup>b</sup> and local government (LG) expenditure divided by the total PHC headcount during the financial year.

Average expenditure per PHC headcount has increased nationally in real terms over eight years from R132 in 2004/05 to R255 in 2012/13. Limpopo spent the lowest per headcount (R221) and Gauteng the highest (R335), resulting in a provincial range of R114 with a range ratio of 1.5:1.

From a district perspective, the Central Karoo (WC) had the highest expenditure of R360 and Siyanda (NC) the lowest at R150. The range between the highest and lowest district expenditure is R210, giving a range ratio of 2.4:1 (Figure 9).

Among the NHI districts, Tshwane (GP) had the highest (R343) expenditure, and the lowest (R193) expenditure was in Thabo Mofutsanyane (FS) (Figure 10).

b Sub-programmes 2.2-2.7: Nutrition; HIV/AIDS; Other Community Services; Community Based Services; Community Health Centres; Community Health Clinics.



Provinces

EC FS GP

KZN

LP MP

NC

NW

WC

#### Figure 9: Provincial Expenditure per PHC Headcount by district, 2012/13

Rand (real 2012/13 prices) [Source: BAS, DHIS]

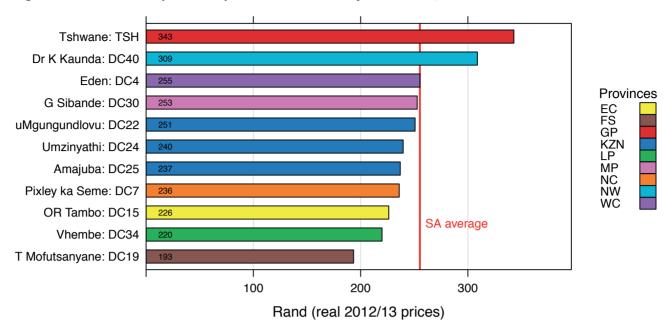
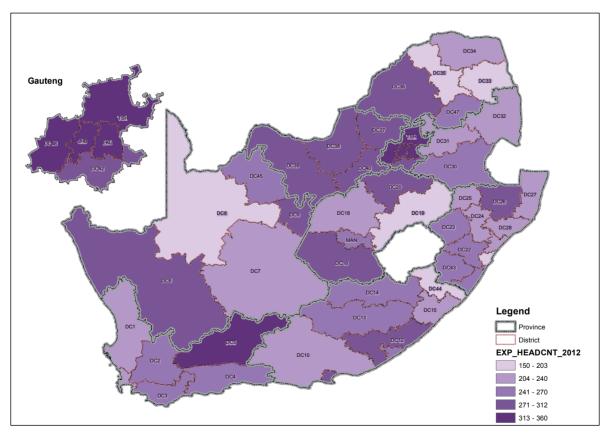
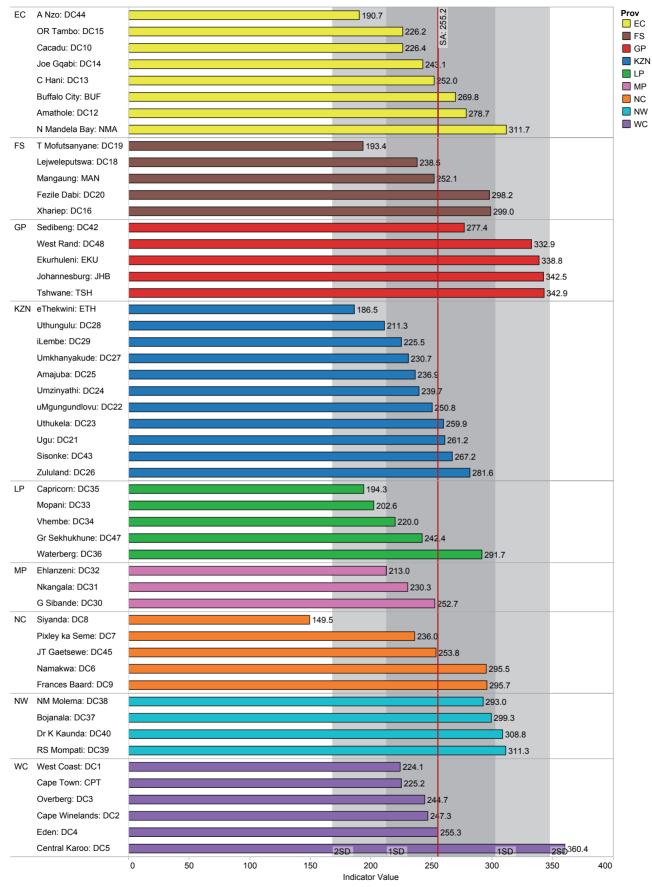


Figure 10: Provincial Expenditure per PHC Headcount by NHI district, 2012/13

### Map 3: Provincial Expenditure per PHC Headcount by district, 2012/13



### Figure 11: Provincial Expenditure per PHC Headcount by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Rand (real 2012/13 prices) Source: BAS, DHIS

### 1.4 Proportion of district health services expenditure on District Management

This indicator illustrates the proportion of the district health services<sup>c</sup> expenditure on district management. This is the first of three indicators which together show the relative proportion of DHS expenditure (excluding PR2.8 Coroner services) that is spent on district management, PHC and district hospitals.

Since 2004/05, the proportion of district health services expenditure on district management (national average) has varied between a low of 4.8% and a high of 5.8% in 2012/13. A wide variation of expenditure on district management exists between the provinces. The provinces with the lowest percentage expenditure are KwaZulu-Natal (2.1%), Free State (3.5%) and the Western Cape (4.8%). The provinces with the highest percentage expenditure are Mpumalanga (8.7%), Northern Cape (9.3%) and the North West (9.5%)

At a district level, the highest percentage was spent in Siyanda (13.6%) in the Northern Cape.<sup>d</sup> The lowest percentage was in Zululand (1.0%) in KwaZulu-Natal. The range difference is 12.6 percentage points (Figure 12).

Among the NHI districts, the highest expenditure was in Dr Kenneth Kaunda (NW) at 12.8%, and the lowest was in Umzinyathi (KZN) at 2.2% (Figure 13).

### **1.5** Proportion of district health services expenditure on District Hospitals

The proportion of district health services expenditure on district hospitals measures the district hospital expenditure (PR 2.9) as a proportion of total district health services expenditure, excluding expenditure on Coroner Services (PR 2.8).

The national average is 37.5%, and the proportion ranged from a low of 20.7% in Gauteng to a high of 49.4% in Limpopo.

At a district level, Umzinyathi (KZN) had the highest proportion of total expenditure on district hospitals (60.7%), and Johannesburg (GP) had the lowest expenditure on district hospitals (6.3%), with a range difference of 54.4 percentage points. The percentage of expenditure on district hospitals declined rapidly in Amajuba (KZN)<sup>e</sup> and Siyanda (NC) due to reallocation of expenditure for hospitals not functioning as district hospitals (Figure 16).

Generally, districts with regional and tertiary hospitals have a lower proportion of expenditure on district hospitals. This could result in the inappropriate utilisation of higher levels of care for primary care needs, due to a shortage of district hospital beds.

Among the NHI districts, Umzinyathi and Amajuba both in KwaZulu-Natal had the highest (60.7%) and lowest (14.7%) percentage expenditure respectively (Figure 17).

### 1.6 Proportion of district health services expenditure on PHC

The proportion of district health services expenditure on non-hospital PHC measures the amount spent on non-hospital PHC Services<sup>f</sup> (PR 2.2-2.7) as a percentage of total district health service expenditure excluding Coroner Services (i.e. PR 2.1-2.7 and 2.9).

The national average is 56.7%. The proportion spent by the provinces ranged from a low of 43.3% in Limpopo to a high of 73.2% in Gauteng. This is the inverse of the spending on district hospitals described in the previous section.

At a district level, there is a distinct difference between the district with the highest percentage expenditure – Johannesburg (GP) at 90.6%, and the district with the lowest percentage expenditure – Joe Gqabi (EC) at 34.8%. This is a range difference of 55.8 percentage points. One reason for this difference is the distribution of district hospitals. In Johannesburg there are few district hospitals and therefore most of the district spending is on non-hospital PHC (Figure 20).

Among the NHI districts, Amajuba and Umzinyathi both in KwaZulu-Natal spent the highest (79.1%), and the lowest percentage on PHC (37.1%) respectively (Figure 21).

c This includes the following sub-programmes in the denominator: District Management; Community Health Clinics; Community Health Centres; Community-Based Services; Other Community Services; HIV; Nutrition; District Hospitals.

d The level of expenditure on district management has not changed dramatically in Siyanda, but the relative proportion has increased due to the large decline in expenditure on district hospitals.

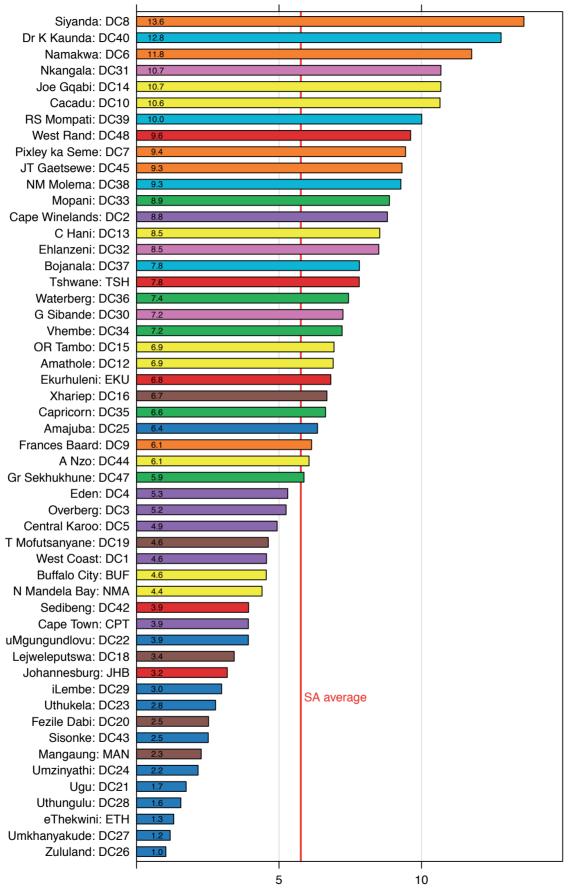
e About 80% of the expenditure recorded under 2.9 District Hospitals in previous years was for the two regional hospitals, Madadeni and Newcastle. Expenditure on Niemeyer Memorial (district hospital) has remained consistent.

f Community Health Clinics; Community Health Centres; Community-Based Services; Other Community Services; HIV; Nutrition.

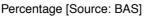
inal			FY 2013	
С	A Nzo: DC44	52.8%	41.2%	6.1%
	Amathole: DC12	42.5%	50.6%	6.9%
	Buffalo City: BUF	23.4%	72.0%	4.6%
	C Hani: DC13	43.1%	48.3%	8.5%
	Cacadu: DC10	49.3%	40.1%	10.6%
	Joe Gqabi: DC14	54.5%	34.8%	10.7%
	N Mandela Bay: NMA	23.9%	71.7%	4.4%
	OR Tambo: DC15	37.1%	55.9%	6.9%
	Total	40.2%	52.6%	7.2%
s	Fezile Dabi: DC20	34.7%	62.8%	2.5%
	Lejweleputswa: DC18	30.4%	66.2%	3.4%
	Mangaung: MAN	41.3%	56.4%	<mark>2.3%</mark>
	T Mofutsanyane: DC19	36.5%	58.9%	4.6%
	Xhariep: DC16	23.1%	70.3%	6.7%
	Total	35.4%	61.1%	3.5%
ЗP	Ekurhuleni: EKU	10.1%	83.1%	6.8%
	Johannesburg: JHB	6.3%	90.6%	3.2%
	Sedibeng: DC42	29.4%	66.7%	3.9%
	Tshwane: TSH	35.2%	57.0%	7.8%
	West Rand: DC48	28.8%	61.6%	9.6%
	Total	20.7%	73.2%	6.1%
<zn< td=""><td>Amajuba: DC25</td><td>14.7%</td><td>79.0%</td><td>6.4%</td></zn<>	Amajuba: DC25	14.7%	79.0%	6.4%
	eThekwini: ETH	32.2%	66.5%	
	iLembe: DC29	33.2%	63.8%	3.0%
	Sisonke: DC43	51.2%	46.3%	2.5%
	Ugu: DC21	40.1%	58.1%	
	uMgungundlovu: DC22	34.6%	61.5%	3.9%
	Umkhanyakude: DC27	53.0%	45.9%	
	Umzinyathi: DC24	60.7%	37.1%	
	Uthukela: DC23	37.0%	60.2%	2.8%
	Uthungulu: DC28	46.5%	52.0%	2.070
	Zululand: DC26	53.7%	45.3%	
	Total	41.9%	56.0%	
Р	Capricorn: DC35	48.2%	45.1%	6.6%
_r	Gr Sekhukhune: DC47	48.1%	40.170	5.9%
	Mopani: DC33	46.7%	44.5%	8.9%
	Vhembe: DC34	40.7%		7.2%
	Waterberg: DC36	48.8%	44.0%	7.4%
	•			
	Total	49.4%	43.3%	7.2%
ΜP	Ehlanzeni: DC32 G Sibande: DC30	43.8%	47.7%	8.5%
		62.070	45.1%	
	Nkangala: DC31	44.2%		10.7%
	Total	46.6%	44.7%	8.7%
NC	Frances Baard: DC9	16.8%	77.0%	6.1%
	JT Gaetsewe: DC45	38.1%	52.6%	9.3%
	Namakwa: DC6	29.0%	59.2%	11.8%
	Pixley ka Seme: DC7	33.5%	57.1%	9.4%
	Siyanda: DC8	28.5%	57.9%	13.6%
	Total	28.0%	62.7%	9.3%
W	Bojanala: DC37	25.7%	66.4%	7.8%
	Dr K Kaunda: DC40	17.9%	69.3%	12.8%
	NM Molema: DC38	29.3%	61.4%	9.3%
	RS Mompati: DC39	32.7%	57.3%	10.0%
	Total	26.9%	63.6%	9.5%
VC	Cape Town: CPT	37.3%	58.7%	3.9%
	Cape Winelands: DC2	25.5%	65.7%	8.8%
	Central Karoo: DC5	46.4%	48.7%	4.9%
	Eden: DC4	38.7%	56.0%	5.3%
	Overberg: DC3	39.7%	55.0%	5.2%
	West Coast: DC1	49.9%	45.5%	4.6%
	Total	37.6%	57.7%	4.8%
		37.5%	56.7%	5.8%
Grand	Total			

## Figure 12: Overview of DHS expenditure by district (percentage on district management, PHC and district hospitals), 2012/13

Subprog (DHS) DM PHC DH



#### Figure 13: Percentage of DHS expenditure on district management by district, 2012/13



Provinces

EC FS GP

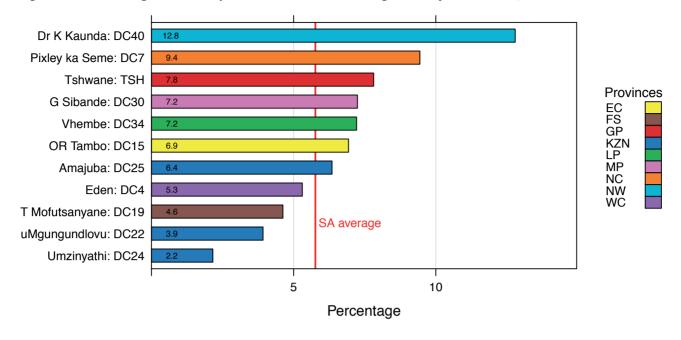
KZN LP

MP

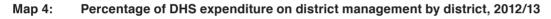
NC

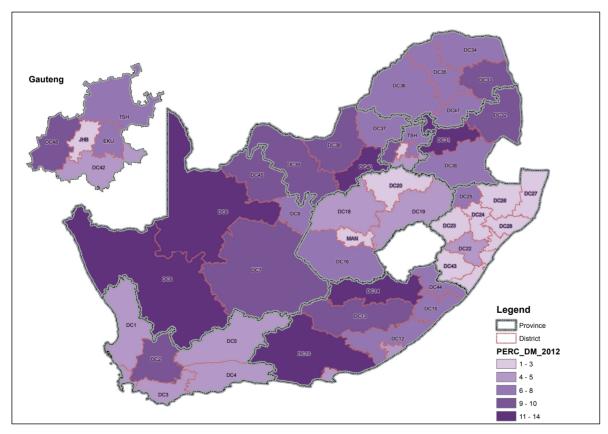
NŴ

WC

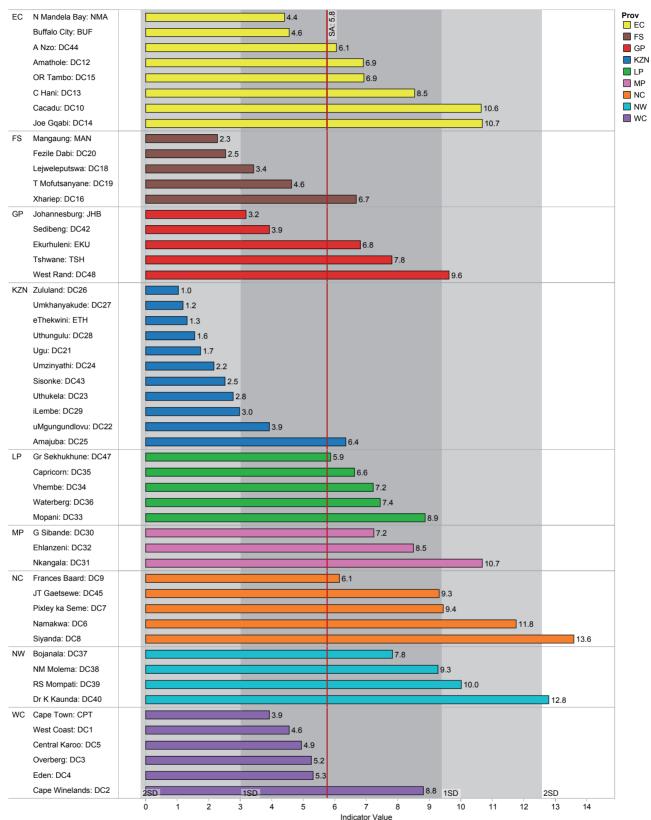


#### Figure 14: Percentage of DHS expenditure on district management by NHI district, 2012/13

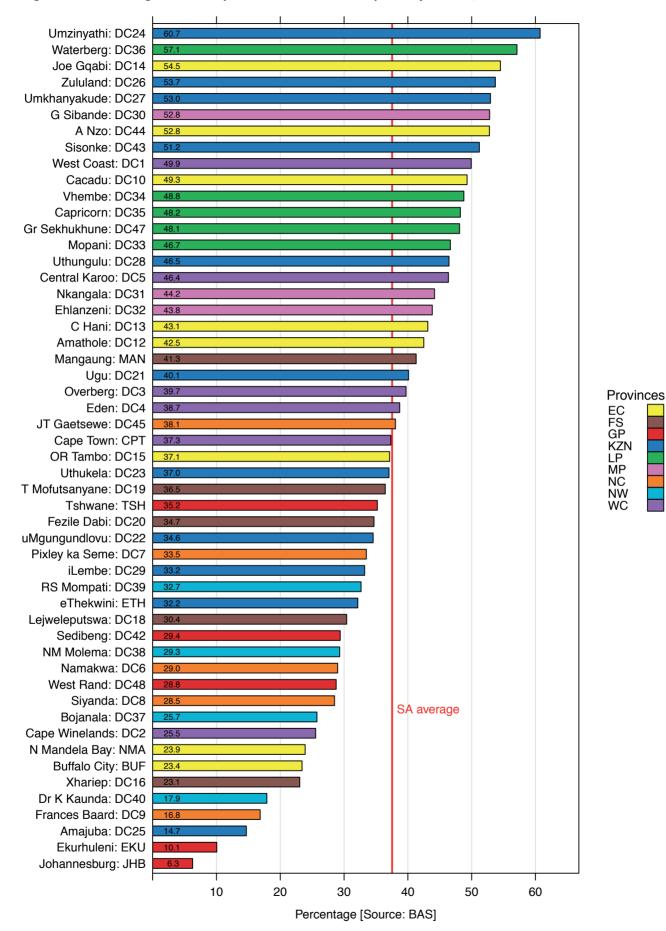




### Figure 15: Percentage of DHS expenditure on district management by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: BAS



#### Figure 16: Percentage of DHS expenditure on district hospitals by district, 2012/13

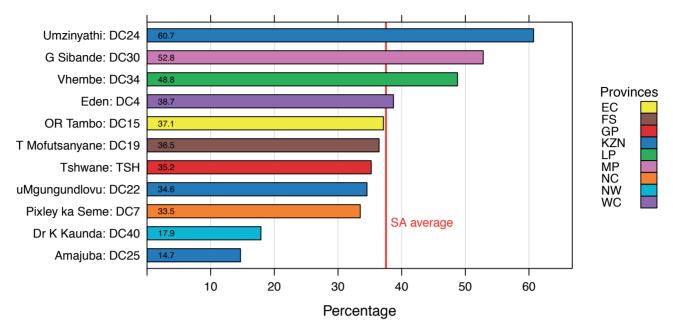
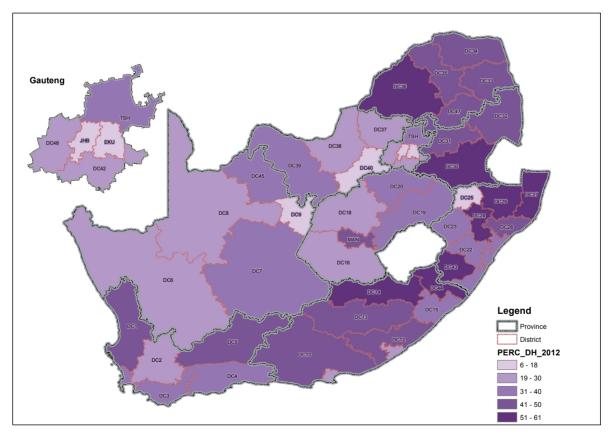
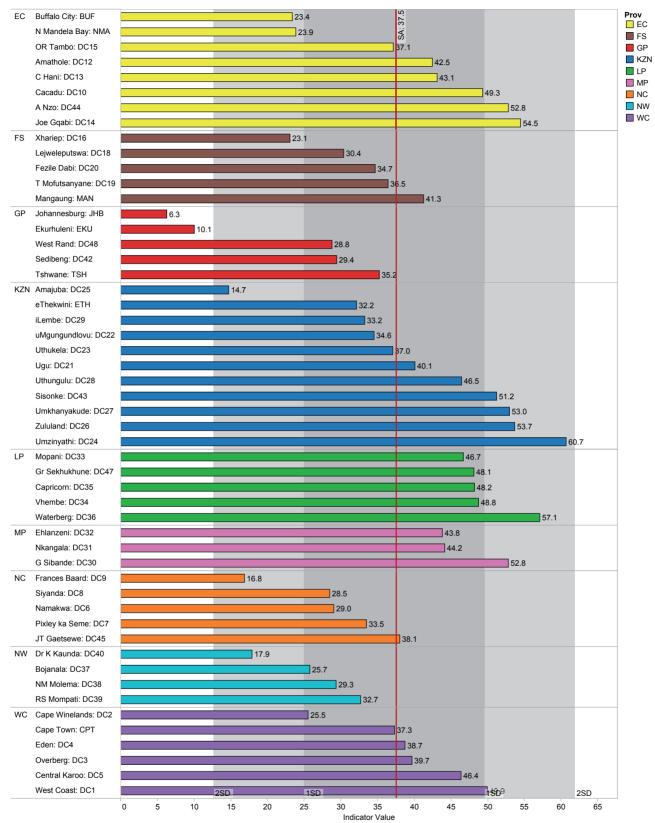


Figure 17: Percentage of DHS expenditure on district hospitals by NHI district, 2012/13

## Map 5: Percentage of DHS expenditure on district hospitals by district, 2012/13







Units: Percentage Source: BAS

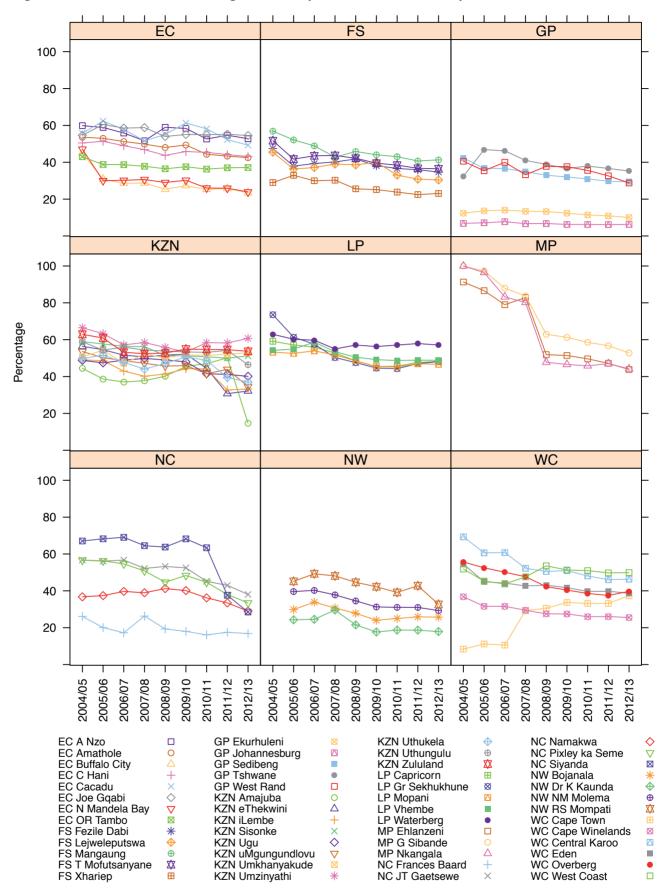
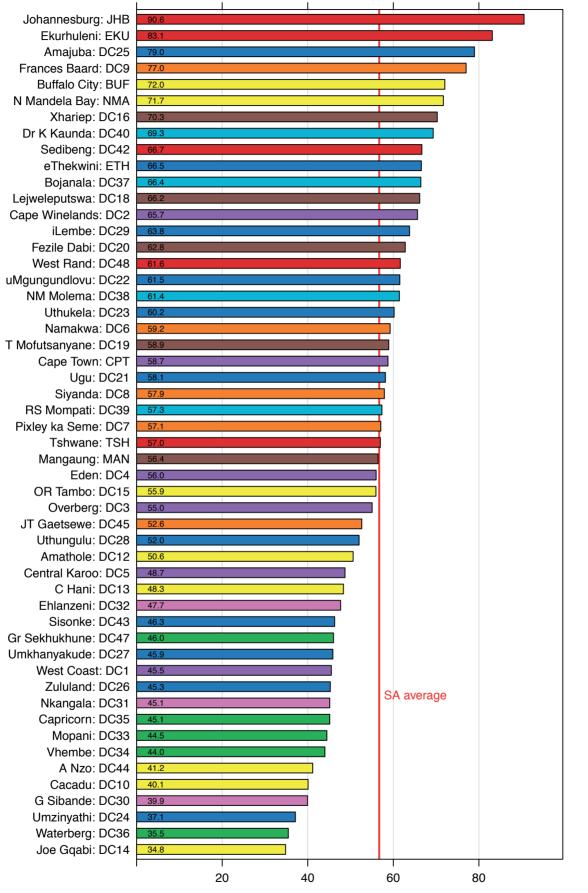


Figure 19: Annual trends: Percentage of DHS expenditure on district hospitals



Provinces

EC FS GP

KZN LP

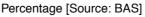
MP

NC

NŴ

WC

#### Figure 20: Percentage of DHS expenditure on PHC by district, 2012/13



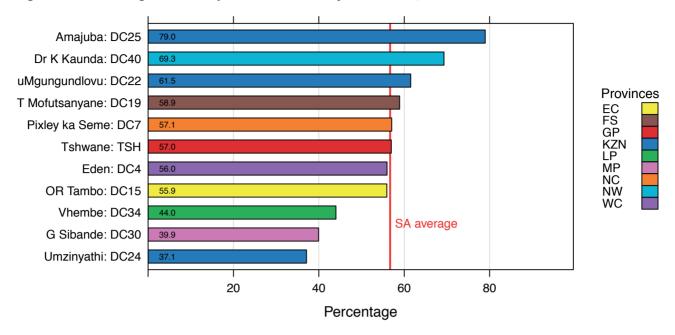
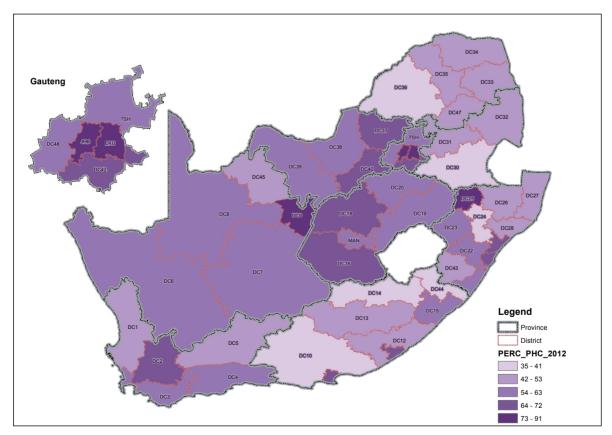
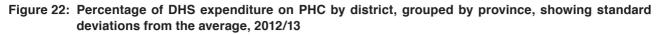
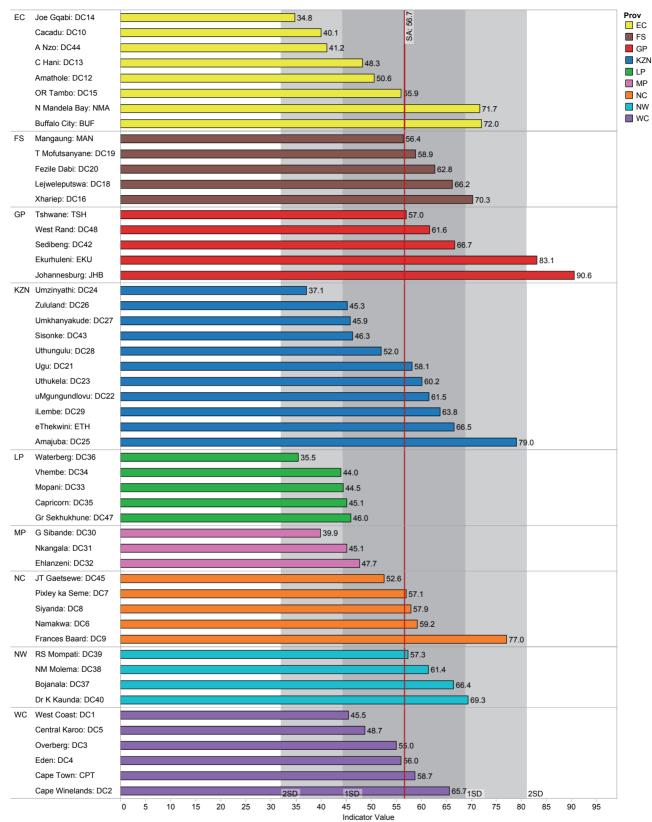


Figure 21: Percentage of DHS expenditure on PHC by NHI district, 2012/13

### Map 6: Percentage of DHS expenditure on PHC by district, 2012/13







Units: Percentage Source: BAS

			2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
DHS expenditure per capita	Eastern Cape	A Nzo: DC44	735	910	948	1 093	1 044	1 108
		Amathole: DC12	991	1 149	1 216	1 384	1 413	1 481
		Buffalo City: BUF	842	932	983	1 043	1 094	1 172
		C Hani: DC13	1 067	1 275	1 309	1 580	1 597	1 633
		Cacadu: DC10	1 192	1 304	1 510	1 785	1 964	1 906
		Joe Ggabi: DC14	1 045	1 178	1 426	1 705	1 824	1 924
		N Mandela Bay: NMA	728	801	917	1 296	1 289	1 557
		OR Tambo: DC15	794	902	954	1 084	1 122	1 116
Б	Free State	Fezile Dabi: DC20	792	863	1 021	1 140	1 188	1 273
		Lejweleputswa: DC18	636	677	857	933	999	1 028
		Mangaung: MAN	924	1 135	1 293	1 449	1 509	1 583
		T Mofutsanyane: DC19	656	739	839	939	969	1 020
		Xhariep: DC16	874	982	1 087	1 181	1 204	1 354
	Gauteng	Ekurhuleni: EKU	497	482	698	829	856	1 066
	J	Johannesburg: JHB	670	709	818	872	899	1 047
		Sedibeng: DC42	767	814	916	1 136	1 135	1 243
		Tshwane: TSH	911	1 019	1 132	1 265	1 474	1 507
		West Rand: DC48	653	772	820	1 109	1 232	1 384
	KwaZulu-Natal	Amajuba: DC25	832	940	1 104	1 112	1 257	796
		eThekwini: ETH	1 147	1 188	1 297	1 158	1 037	1 091
		iLembe: DC29	1 076	1 072	1 243	1 187	1 090	1 193
		Sisonke: DC43	1 167	1 225	1 319	1 273	1 394	1 526
		Ugu: DC21	1 084	1 108	1 093	1 101	1 225	1 432
		uMgungundlovu: DC22	975	987	1 136	1 204	1 343	1 299
		Umkhanyakude: DC27	1 370	1 331	1 460	1 467	1 609	1 722
		Umzinyathi: DC24	1 320	1 337	1 486	1 496	1 728	1 951
		Uthukela: DC23	898	859	995	958	915	1 052
		Uthungulu: DC28	1 210	1 208	1 318	1 255	1 424	1 352
		Zululand: DC26	1 159	1 189	1 316	1 312	1 495	1 570
	Limpopo	Capricorn: DC35	857	972	1 079	1 196	1 259	1 306
		Gr Sekhukhune: DC47	753	888	1 003	1 111	1 263	1 307
		Mopani: DC33	1 000	1 127	1 242	1 341	1 413	1 514
		Vhembe: DC34	1 046	1 166	1 281	1 387	1 486	1 566
		Waterberg: DC36	1 123	1 445	1 569	1 800	1 918	2 048
	Mpumalanga	Ehlanzeni: DC32	891	1 004	1 187	1 324	1 370	1 413
	мрипаануа	G Sibande: DC30	1 000	1 105	1 286	1 501	1 613	1 665
		Nkangala: DC31	739	819	938	1 083	1 142	1 206
	North West	Bojanala: DC37	733	759	842	969	1 016	1 069
	North West	Dr K Kaunda: DC40	689	735	880	878	890	1 010
		NM Molema: DC38	1 026	1 131	1 194	1 340	1 356	
			1 200	1 301		1 605	1 733	1 439
	Northern Cape	RS Mompati: DC39			1 488			1 753
		Frances Baard: DC9 JT Gaetsewe: DC45	843 958	953 1 044	1 071 1 107	1 276	1 325 1 501	1 251 1 416
		Namakwa: DC6	1 431	1 675	1 760	1 351 2 171	2 260	
		Pixley ka Seme: DC7	1 431	1 675	1 235	1 563	1 584	2,193 1 661
		-	851	975	1 162	1 333	1 007	819
	Western Cape	Siyanda: DC8						
	western Cape	Cape Town: CPT	954	1 019	1 176	1 293	1 359	1 389
		Cape Winelands: DC2	1 402	890	966	1 085	1 082	1 113
		Central Karoo: DC5	1 402	1 622	1 895	2 333	2 388	2,627
		Eden: DC4	1 075	1 036	1 195	1 376	1 392	1 447
		Overberg: DC3	860	1 095	1 181	1 320	1 385	1 514
		West Coast: DC1	1 348	1 301	1 410	1 616	1 697	1 699

# Table 1: Financial indicator Rand values in real 2012/13 terms per district

### Section A: Financial Indicator Comparisons by District

			2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
PHC expenditure per capita	Eastern Cape	A Nzo: DC44	282	310	321	445	407	458
	Eastern Cape	Amathole: DC12	441	522	527	678	657	731
		Buffalo City: BUF	582	676	690	759	789	851
		C Hani: DC13	475	602	577	736	723	792
		Cacadu: DC10	394	396	399	543	664	780
		Joe Gqabi: DC14	348	397	457	586	575	669
		N Mandela Bay: NMA	498	562	634	996	980	1 244
		OR Tambo: DC15	429	508	522	633	629	626
	Free State	Fezile Dabi: DC20	450	480	606	688	730	799
		Lejweleputswa: DC18	355	397	486	604	666	681
		Mangaung: MAN	500	611	685	787	861	901
		T Mofutsanyane: DC19	348	413	491	554	584	601
		Xhariep: DC16	549	692	765	834	859	952
	Gauteng	Ekurhuleni: EKU	430	416	616	738	740	944
	J	Johannesburg: JHB	604	601	740	802	826	966
		Sedibeng: DC42	453	492	571	770	748	831
		Tshwane: TSH	475	596	682	749	888	910
		West Rand: DC48	363	356	400	630	736	869
	KwaZulu-Natal	Amajuba: DC25	490	526	572	561	592	628
		eThekwini: ETH	617	627	665	680	735	756
		iLembe: DC29	633	613	679	651	700	766
		Sisonke: DC43	449	538	597	591	669	706
		Ugu: DC21	510	555	485	639	709	836
		uMgungundlovu: DC22	514	539	599	699	747	814
		Umkhanyakude: DC27	630	646	689	700	747	790
		Umzinyathi: DC24	527	563	675	605	699	790
		Uthukela: DC23	488	439	479	474	540	641
					613	583	647	710
		Uthungulu: DC28	546	553				
	Limpone	Zululand: DC26	523	538	582	583	665	711
	Limpopo	Capricorn: DC35	379	447	530	554	583	593
		Gr Sekhukhune: DC47	316	371	448	545	618	602
		Mopani: DC33	465	535	623	604	622	679
		Vhembe: DC34	464	475	554	590	641	694
		Waterberg: DC36	438	506	563	641	666	746
	Mpumalanga	Ehlanzeni: DC32	405	427	495	595	639	679
		G Sibande: DC30	333	364	422	570	623	674
		Nkangala: DC31	342	383	439	527	538	566
	North West	Bojanala: DC37	449	490	586	682	708	724
		Dr K Kaunda: DC40	420	504	664	669	667	704
		NM Molema: DC38	535	648	722	829	839	893
		RS Mompati: DC39	496	600	749	868	867	1 005
	Northern Cape	Frances Baard: DC9	668	751	861	997	991	971
		JT Gaetsewe: DC45	301	436	458	675	754	766
		Namakwa: DC6	805	844	895	1 203	1 309	1 301
		Pixley ka Seme: DC7	525	639	599	777	915	950
		Siyanda: DC8	283	299	312	431	541	492
	Western Cape	Cape Town: CPT	671	670	756	834	885	841
		Cape Winelands: DC2	507	563	604	723	716	738
		Central Karoo: DC5	667	746	854	1 095	1 147	1 277
		Eden: DC4	593	511	647	786	781	824
		Overberg: DC3	441	574	596	730	769	821
		West Coast: DC1	637	512	578	724	785	763

			2007/08	2008/09	2009/10	2010/11	2011/12	2012/13
Ħ	Eastern Cape	A Nzo: DC44	155	151	137	202	177	191
our		Amathole: DC12	160	192	192	265	243	279
PHC expenditure per headcount		Buffalo City: BUF	190	221	215	248	243	270
		C Hani: DC13	172	195	172	247	228	252
		Cacadu: DC10	100	93	103	136	166	226
		Joe Gqabi: DC14	162	172	188	223	204	243
		N Mandela Bay: NMA	116	123	136	230	239	312
		OR Tambo: DC15	191	207	190	232	215	226
	Free State	Fezile Dabi: DC20	161	169	212	238	256	298
		Lejweleputswa: DC18	169	171	199	249	249	238
		Mangaung: MAN	192	214	240	271	253	252
		T Mofutsanyane: DC19	138	150	180	207	201	193
		Xhariep: DC16	188	223	247	259	267	299
	Gauteng	Ekurhuleni: EKU	237	205	288	330	289	339
	Ŭ	Johannesburg: JHB	265	239	296	310	301	343
		Sedibeng: DC42	216	211	233	292	248	277
		Tshwane: TSH	226	247	273	289	317	343
		West Rand: DC48	223	173	176	265	282	333
	KwaZulu-Natal	Amajuba: DC25	228	241	246	244	248	237
		eThekwini: ETH	227	209	205	203	190	187
		iLembe: DC29	237	204	224	217	216	225
		Sisonke: DC43	242	261	265	258	272	267
		Ugu: DC21	216	223	181	231	240	261
		uMgungundlovu: DC22	180	178	188	230	230	251
		Umkhanyakude: DC27	254	244	233	228	229	231
		Umzinyathi: DC24	233	217	254	223	236	240
		Uthukela: DC23	237	214	212	233	243	260
		Uthungulu: DC28	229	216	220	210	215	211
		Zululand: DC26	223	219	246	257	272	282
	Limpopo	Capricorn: DC35	161	163	166	171	182	194
		Gr Sekhukhune: DC47	168	158	182	246	245	242
		Mopani: DC33	134	154	187	199	192	203
		Vhembe: DC34	116	118	143	178	188	220
		Waterberg: DC36	197	213	223	278	256	292
	Mpumalanga	Ehlanzeni: DC32	145	140	166	209	204	213
		G Sibande: DC30	163	163	193	238	244	253
		Nkangala: DC31	168	182	194	233	222	230
	North West	Bojanala: DC37	202	204	234	277	297	299
		Dr K Kaunda: DC40	152	183	235	265	293	309
		NM Molema: DC38	185	204	224	272	272	293
		RS Mompati: DC39	152	167	218	263	268	311
	Northern Cape	Frances Baard: DC9	203	225	266	303	310	296
		JT Gaetsewe: DC45	98	140	148	219	261	254
		Namakwa: DC6	184	179	193	267	312	295
		Pixley ka Seme: DC7	125	145	150	178	224	236
		Siyanda: DC8	97	95	98	129	163	150
	Western Cape	Cape Town: CPT	211	187	196	210	222	225
	western Cape	Cape Winelands: DC2	145	153	190	210	225	247
		Cape Winelands. DC2 Central Karoo: DC5	145	174	212	211	331	360
		Eden: DC4	147	116	165	200	226	255
		Overberg: DC3	147	145	143	181	220	255
		West Coast: DC1	128	145	143	207	202	245
		Host Oddst. DOT	140	119	155	207	201	224

# 2 Management PHC

# Mutheiwana Dombo

# 2.1 PHC supervisor visit rate fixed clinic/community health centre/community day centre

Supervisory visits are considered an important process indicator of the quality of care in providing primary health care (PHC) services in the public sector. The PHC supervisor visit rate fixed clinic/community health centre/community day centre (fixed clinic/CHC/CDC) is the number of fixed PHC facilities visited by a clinical supervisor at least once a month, as a proportion of the total number of fixed PHC facilities.

These visits are part of a system for identifying and addressing problems at facility level in relation to priority programmes; staff competencies and training; information systems; referral systems and administrative matters such as finance, medical supplies and equipment.<sup>a</sup> Therefore, PHC supervisors need management skills and job descriptions which include organising, planning, leadership, decision-making, communication, co-ordination, delegation, discipline and governance.<sup>a</sup> Given the importance of supervisory visits for quality improvement, the 2012/13 national target of at least one monthly visit per facility was 80%.

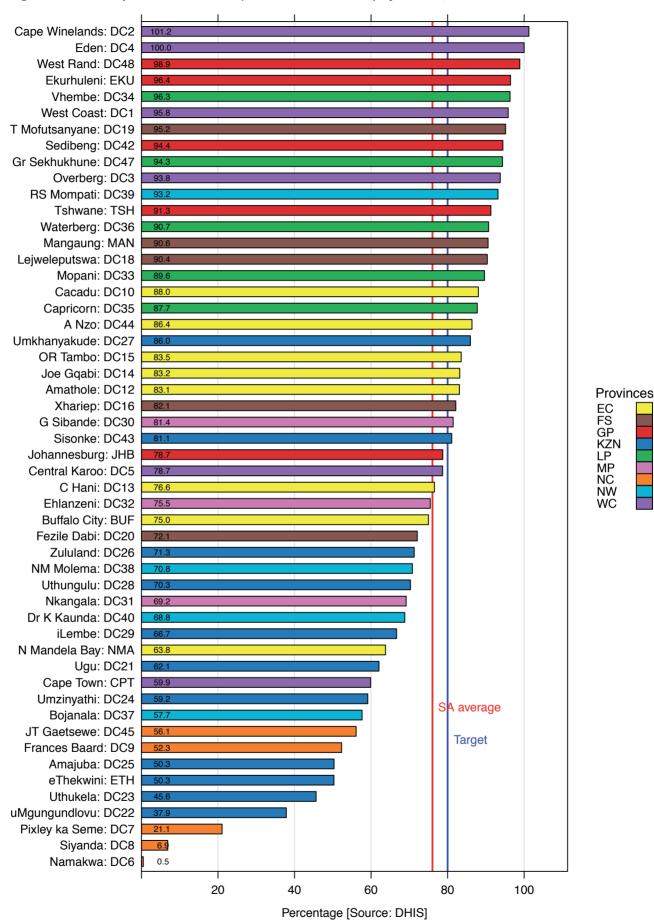
Figure 1 shows the ranking of the 52 districts around the national target and average. The average for South Africa was 76%, representing a small increase of 1.9 percentage points on the average in the previous financial year. Of the 52 districts, 29 were above the national average, with 26 of these achieving the national target of 80%. Seven districts recorded 50% and below, of which four were in KwaZulu-Natal (KZN).

As shown in Figure 1, the districts with the highest supervision rates were Cape Winelands (101.2%) and Eden (100%), both in the Western Cape, followed by West Rand (GP) (98.9%), Ekurhuleni (GP) (96.4%) and Vhembe (LP) (96.3%). The rate for Cape Winelands, which is over 100% and 13.6 percentage points higher than the previous year, is due to data error, since not all facilities have 100% supervision but a few facilities are missing denominator data, i.e. they are not counted in the total of fixed facilities. As has been the trend in the past, the lowest rates were found in the Northern Cape districts of Namakwa (0.5%) and Siyanda (6.9%).

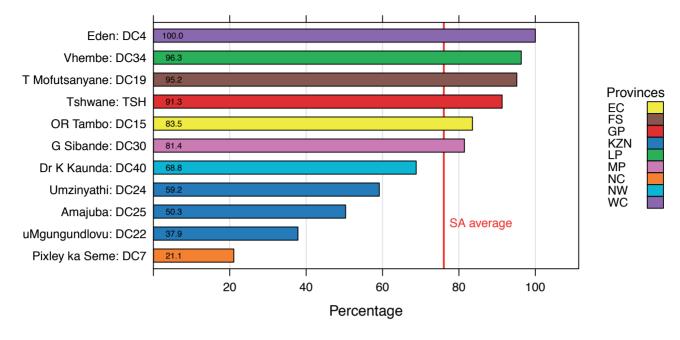
Figure 2 shows the supervision rate by NHI district. Of the 11 NHI districts, six achieved supervision rates above the national target. Of those that were below the national target, three recorded 50% or below. The highest rates were found in Eden (WC) (100%), Vhembe (LP) (96.3%), Thabo Mofutsanyane (FS) (95.2%) and Tshwane (GP) (91.3%) with supervision rates above 90%. Pixley ka Seme (NC) had the lowest rate at 21.1%.

Limpopo Province had the highest supervision rate (91.9%), followed closely by Gauteng (89.7%) and the Free State (88.2%). Once again, the Northern Cape had the lowest average supervision rate (29%). However, the rate increased by 2.6 percentage points from 2011/12. The greatest improvements from the 2011/12 rates were seen in the Free State, North West and Limpopo provinces, with percentage point increases of 12.3, 9.4 and 7.4 respectively. The Eastern Cape and Mpumalanga provinces had decreased rates from the previous year, with a 5.4 and 4.6 percentage point drop respectively. KwaZulu-Natal's average supervision rate has plateaued over the past three years around the 60% mark.

a National Department of Health Quality Assurance Directorate. Primary Health Care Supervision Manual 2009. Pretoria: NDoH; 2009 [cited 9 September 2013]. Available from: http://www.doh.gov.za/docs/factsheets/pharma/manual/man09\_1-14.pdf

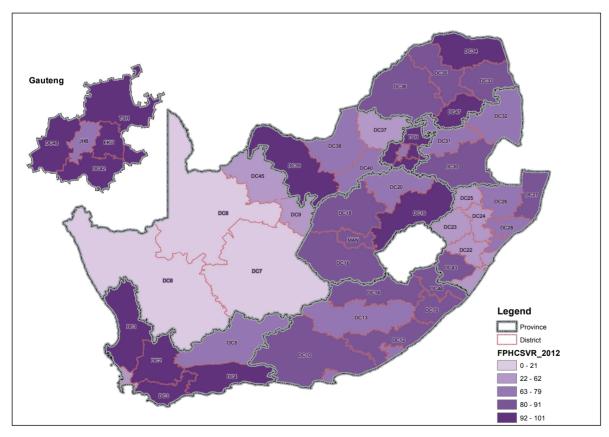


#### Figure 1: PHC supervision visit rate (fixed clinic/CHC/CDC) by district, 2012/13

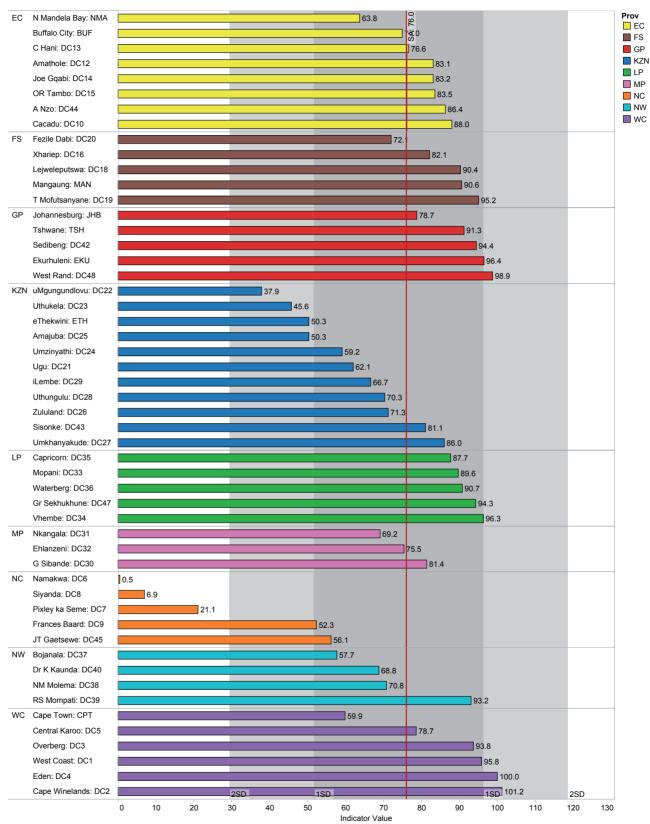


### Figure 2: PHC supervision visit rate (fixed clinic/CHC/CDC) by NHI district, 2012/13

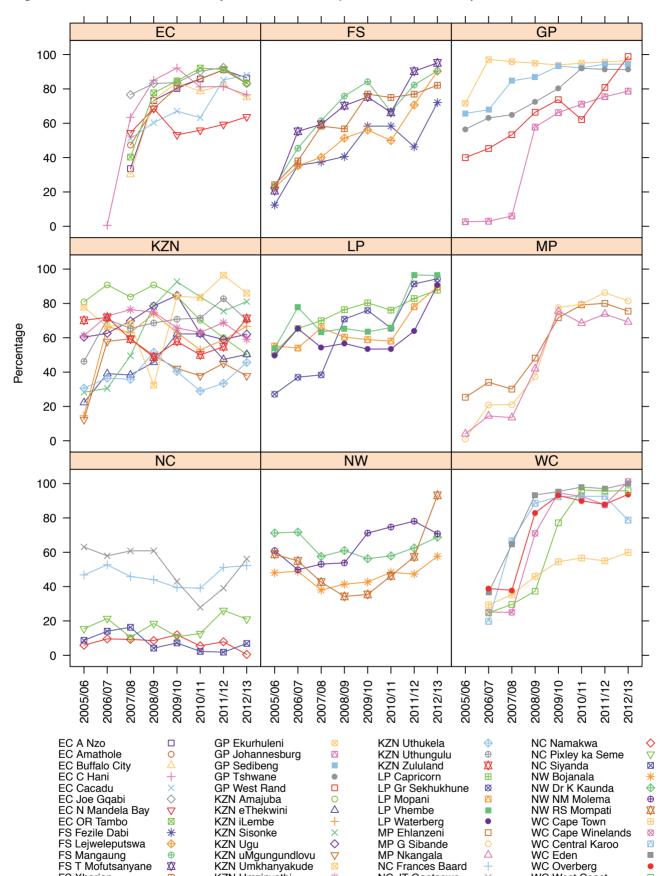




#### PHC supervision visit rate (fixed clinic/CHC/CDC) by district, grouped by province, showing Figure 3: standard deviations from the average, 2012/13



Units: Percentage Source: DHIS





FS Xhariep

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**KZN** Umzinyathi

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NC JT Gaetsewe

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WC West Coast

# 3 Management Inpatients

# Introduction

All of the following indicators are measures of efficiency, which is defined as "the allocation and use of resources in a manner that obtains the best health service outputs at the least cost".<sup>a</sup> All of the indicators in this section are presented for district hospitals only, unless otherwise indicated.

# 3.1 Average length of stay

The average length of stay (ALOS) indicator measures how long, on average, each patient spends in a hospital, expressed as a number of days. The ALOS is calculated by using the patient days (number of inpatient days plus half of the total number of day patients seen) divided by the number of separations (discharges added together with transfer-out, deaths and day patients).

ALOS is regarded as an indicator of efficiency, since a shorter stay can reduce the cost per patient and allow more patients to be treated in a given period. Moreover, a shorter stay in hospital can also make provision for treatment to be shifted from expensive inpatient care to post-acute settings. However, very short ALOS could be more service-intensive and could incur more costs per episode or costs per day. It could also have adverse effects on health outcomes, might reduce the comfort and recovery of the patient, and may lead to a rising readmission rate.<sup>b</sup> A low ALOS may also indicate inadequate quality of care.

Too long a stay is also concerning, and could be as a result of many factors, including delayed patient diagnosis, treatment and overall management, the patient's low socio-economic status, inadequate transport and poor referral systems. A persistently high ALOS should be investigated by managers, and processes of patient care, referral procedures and quality of service need to be evaluated.

In 2012/13, the South African average for ALOS was 4.2 days. Figure 1 shows the values of ALOS per district. Frances Baard (NC) had the shortest ALOS (1.1 days) followed by Xhariep (FS) (2.1 days). In contrast, both Uthungulu and iLembe districts in KwaZulu-Natal (KZN) had the longest ALOS (6.8 days), followed by Buffalo City (6.3 days) in the Eastern Cape (EC). What becomes clear is that there are provincial patterns (Map 1). All the districts in the Northern Cape and Free State, except for JT Gaetsewe (NC) (3.6 days) and Mangaung (FS) (3.9 days) respectively, have ALOS well below the national average. Apart from Amajuba with an ALOS at 3.0 days, 10 of the 11 KZN districts reported an ALOS higher than the national average. Six of the eight EC districts were above the national average. However, it is interesting to note that the ALOS is generally low in the vast, sparsely populated districts of the Northern Cape.

Four of the 11 NHI districts have an ALOS above the national average.

The annual trends are shown in Figure 4. The ALOS in Mangaung (FS) is clearly higher than all other provincial districts, while KZN's districts show a clear reduction with each district having a unique pattern. EC districts also show an obvious decline; however, Buffalo City trends have fluctuated, as only 13% of patient separations in Buffalo City are in district hospitals.

a Mwase T. The Application of National Health Accounts to Hospital Efficiency Analyses in Eastern and Southern Africa. Working Paper. Bethesda, MD: The Partners for Health Reformplus Project, Abt Associates Inc.; August 2006.

b Organisation for Economic Co-operation and Development (OECD). Average length of stay in hospitals. In: OECD Health at a Glance: Europe 2012. Paris: OECD Publishing; November 2012.

#### Frances Baard: DC9 Xhariep: DC16 SA average Namakwa: DC6 Pixley ka Seme: DC7 Target Lejweleputswa: DC18 T Mofutsanyane: DC19 Overberg: DC3 Siyanda: DC8 West Coast: DC1 2.87 Cape Winelands: DC2 2.89 Ekurhuleni: EKU Tshwane: TSH Amajuba: DC25 3 0. Eden: DC4 Central Karoo: DC5 3.17 Dr K Kaunda: DC40 Sedibeng: DC42 Fezile Dabi: DC20 Bojanala: DC37 Cape Town: CPT 3.54 JT Gaetsewe: DC45 Johannesburg: JHB N Mandela Bay: NMA 3.63 Cacadu: DC10 3 64 West Rand: DC48 NM Molema: DC38 3.9 Mangaung: MAN Ehlanzeni: DC32 4.01 Mopani: DC33 G Sibande: DC30 4.11 RS Mompati: DC39 4 14 Waterberg: DC36 4.1 Gr Sekhukhune: DC47 4.1 Nkangala: DC31 4.24 eThekwini: ETH Capricorn: DC35 C Hani: DC13 4.48 Vhembe: DC34 4 64 uMgungundlovu: DC22 Uthukela: DC23 Joe Ggabi: DC14 Sisonke: DC43 Umkhanyakude: DC27 Amathole: DC12 5.5 A Nzo: DC44 5.5 OR Tambo: DC15 Umzinyathi: DC24 Zululand: DC26 Ugu: DC21 Buffalo City: BUF iLembe: DC29 Uthungulu: DC28 2 6 4 Days [Source: DHIS]

Provinces

EC FS

GP

LP MP

NC

NW

WC

KZN

### Figure 1: Average length of stay (district hospitals) by district, 2012/13

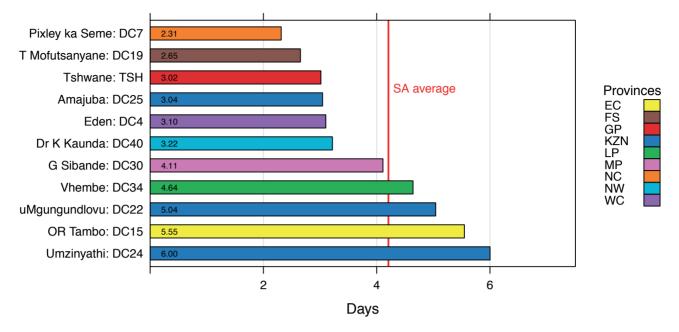
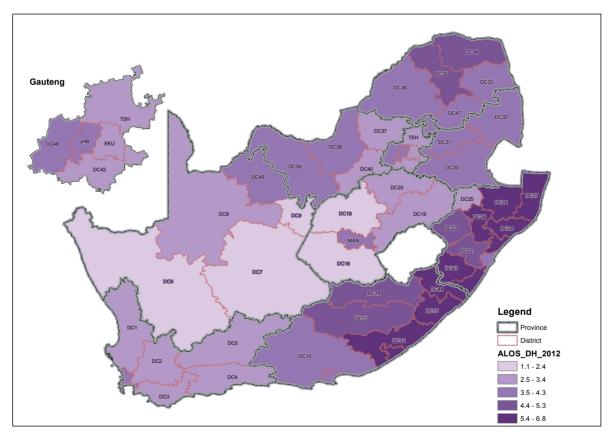
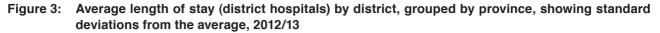
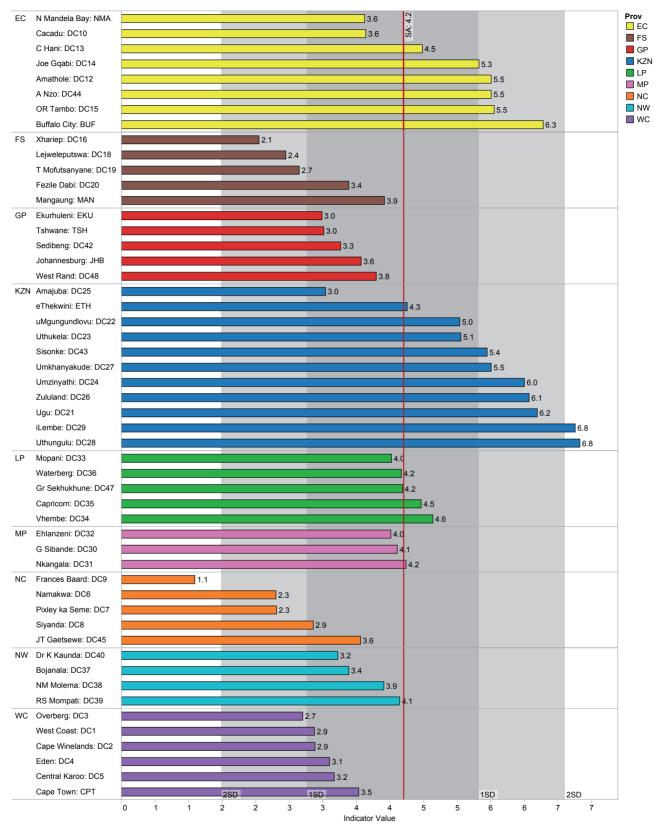


Figure 2: Average length of stay (district hospitals) by NHI district, 2012/13

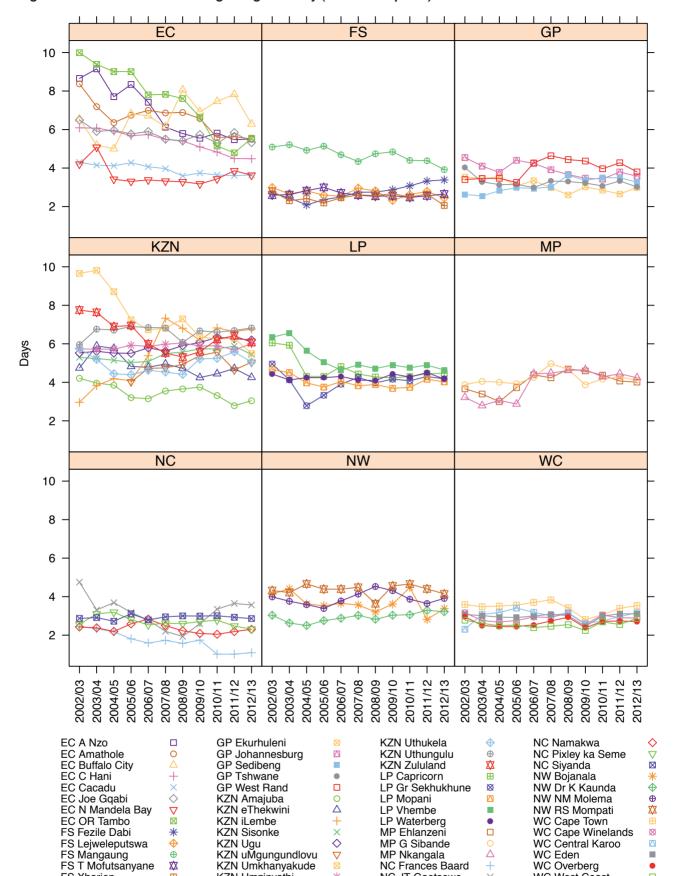
### Map 1: Average length of stay (district hospitals) by district, 2012/13







Units: Days Source: DHIS



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NC JT Gaetsewe

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KZN Umzinyathi

FS Xhariep

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Figure 4: Annual trends: Average length of stay (district hospitals)

WC West Coast

# 3.2 Inpatient bed utilisation rate

This indicator measures the occupancy of the beds available for use in district hospitals, and represents how efficiently a hospital uses its available capacity. This rate is expressed as a percentage and is calculated by dividing the number of inpatient days by the usable bed days. In a district which has more than one hospital, these data can mask inequities and conceal variations between the individual hospitals.

The SA average for bed inpatient utilisation rate (BUR) has been about 65% over the last five years, with a low of 64.7% in 2010/11 and a high of 68% in 2008/09. The 2012/13 BUR is 67.3% which is a minimal rise from 67.2% in 2011/12. The distribution of BUR by district is shown in Figure 5.

Nine districts – City of Cape Town (WC) (94.3%), Namakwa (NC) (87.9%), Ekurhuleni (GP) (87.1%), Siyanda (NC) (84.0%), West Coast (WC) (83.7%), Fezile Dabi (FS) (83.6%), Eden (WC) (82.6%), Mangaung (FS) (82.5%) and Bojanala (NW) (81.2%) – had BURs of over 80%. This was a clear increase from the previous year, when five districts had BURs of 80% or higher.

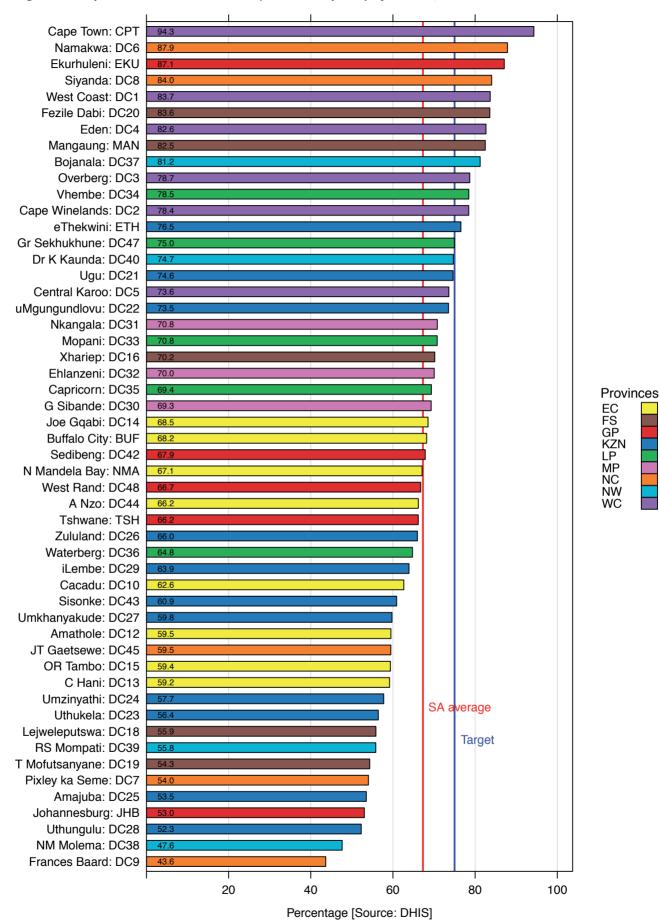
The highest BUR was 94.3% for the City of Cape Town (WC) and the lowest was Frances Baard District (NC) at 43.6%. The difference is more than two-fold. Sixteen districts had BURs lower than 60%, a deterioration from 2011/12 when there were 12 districts with BURs under 60%.

In the Western Cape, all the districts have BURs that are greater than the national average. The Northern Cape is of particular interest, as its districts show the most intra-provincial variation. Namakwa (87.9%) and Siyanda (84.0%) have the second and fourth highest BURs respectively, while Frances Baard (43.6%) and Pixley ka Seme (54.0%) are among the lowest. In Mpumalanga, all the districts had narrow intervals between each other, showing a uniform provincial picture.

In the North West Province, two districts, Mompati (55.8%) and NM Molema (47.6%) are among the 10 districts with the lowest BUR. It is of concern that both these districts have dropped from 2011/12.

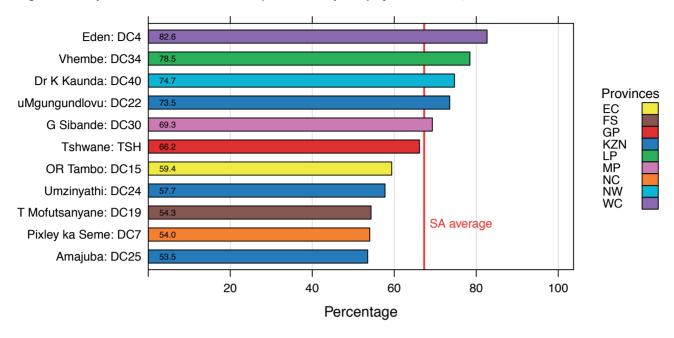
Johannesburg Metropolitan District (GP) has a BUR of 53.0%, which is the fourth lowest nationally. Given that there is a drastic shortage of district-level beds in Johannesburg, this low BUR is difficult to understand.

There is a wide range in the BUR among the NHI districts, which probably highlights the differences among these districts across factors such as socio-economic status, geographic context, disease burden, management and resources.



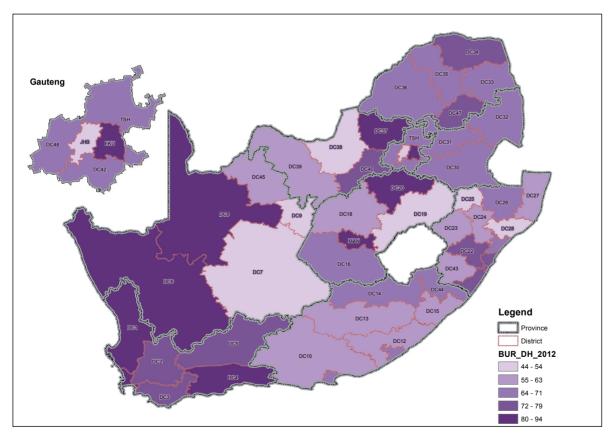
#### Figure 5: Inpatient bed utilisation rate (district hospitals) by district, 2012/13



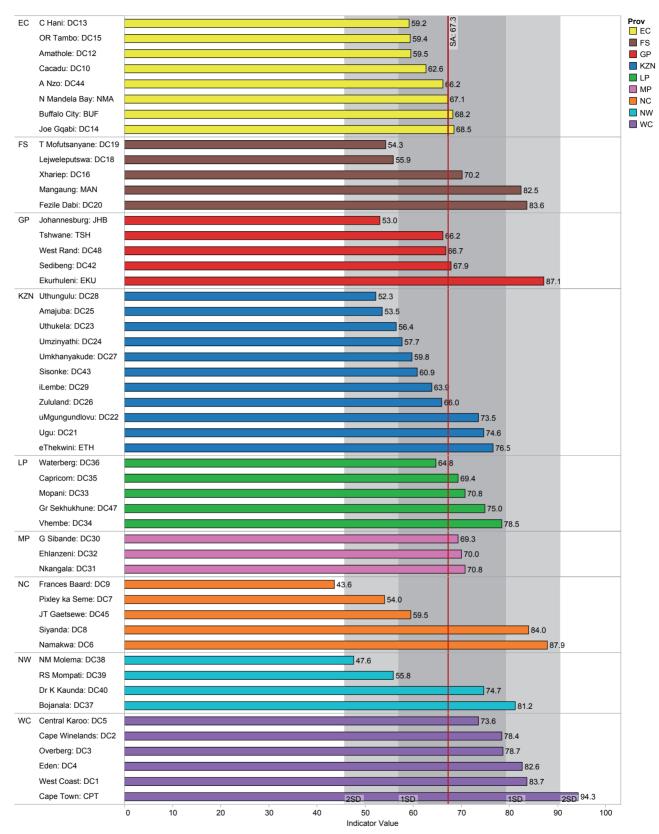


#### Figure 6: Inpatient bed utilisation rate (district hospitals) by NHI district, 2012/13

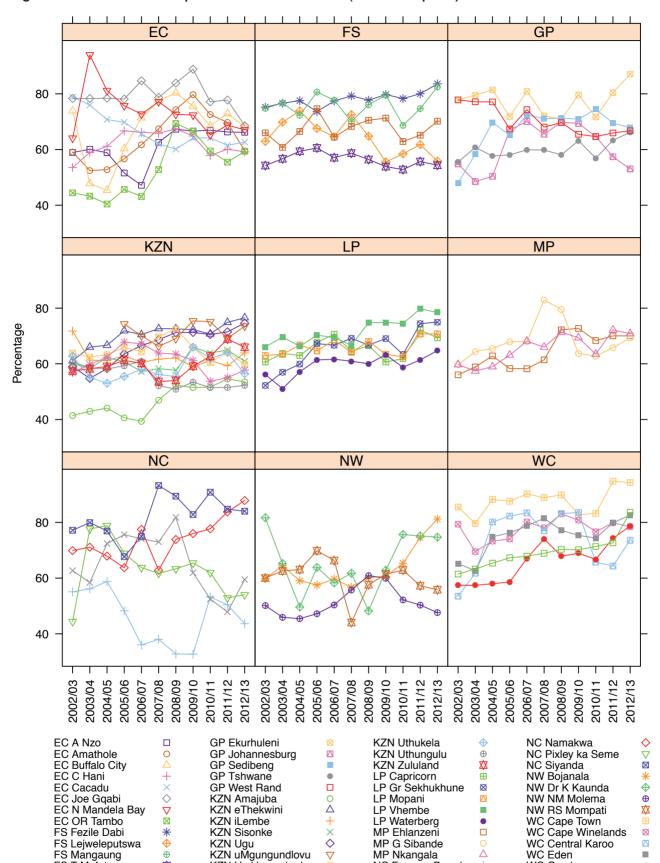




# Figure 7: Inpatient bed utilisation rate (district hospitals) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: DHIS



KZN Umkhanyakude

KZN Umzinyathi

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NC Frances Baard

NC JT Gaetsewe

+

 $\times$ 

WC Overberg

WC West Coast

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FS T Mofutsanyane

FS Xhariep

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# 3.3 Expenditure per patient day equivalent

Hospitals consume a large proportion of the healthcare budget. A hospital bed is both a scarce and an expensive commodity in health care, and efficient bed management is known to bring about significant financial benefit to the hospital. Expenditure per patient day equivalent (PDE) is a composite indicator because it links financial data with service-related data from the hospital admissions and outpatients records. All values in this section are adjusted for the effects of inflation and are reported in real 2012/13 prices.

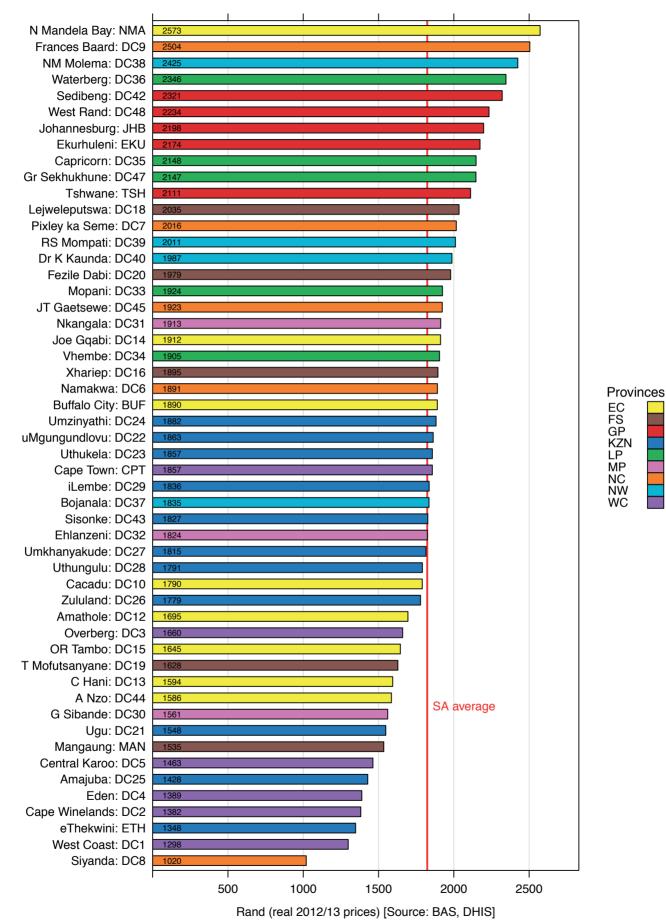
Expenditure per PDE reflects whether a particular hospital is being optimally managed. It measures and compares the inputs (total financial resources available to the hospital) with the outputs (volume of patients seen). It is important for managers to understand the breakdown of their costs and to ensure that they benchmark their hospitals against similar district hospitals in the province.

In 2012/13, the average expenditure per PDE in South Africa for all district hospitals was R1 823, which is higher than the 2011/12 value of R1 740. Figure 9 shows a wide range of expenditure per PDE across the 52 districts, from R2 573 in Nelson Mandela Bay (EC) to R1 020 in Siyanda (NC) – an almost three-fold difference. The second highest is Frances Baard (NC) at R2 504.

There have been very wide fluctuations in values in the Northern Cape over several years, as illustrated in Figure 12. The Eastern Cape also showed a large variance with Alfred Nzo (R1 586) and Chris Hani (R1 594) districts having the lowest expenditure per PDE, and Nelson Mandela Bay (R2 573) having the highest. Gauteng districts had high values on the whole, and the Western Cape (apart from the City of Cape Town) showed a low expenditure per PDE. KwaZulu-Natal and Mpumalanga have all their districts in the middle and low ranks of expenditure.

Figure 9 shows that there are wide intra-provincial variations in 2012/13 – and over the past four years – in the trends of expenditure per PDE. As most districts contain a number of district hospitals, these district variations conceal the much greater variations that exist between individual hospitals. To illustrate this point, in Uthungulu (KZN), the district average expenditure per PDE in 2012/13 was R1 791. Within the district there are six district hospitals, where expenditure per PDE varies in range from KwaMagwaza (R2 530), to Eshowe Hospital at R1 015 – a difference of over 100% between the lowest and highest expenditure per PDE by hospital. Similar and even greater differences between the expenditure per PDE values can be seen in most districts. These differences require investigation by hospital, district, provincial and national managers.

In terms of the NHI districts, six of the 11 are above the national average, as illustrated in Figure 10.



#### Figure 9: Expenditure per patient day equivalent (district hospitals) by district, 2012/13

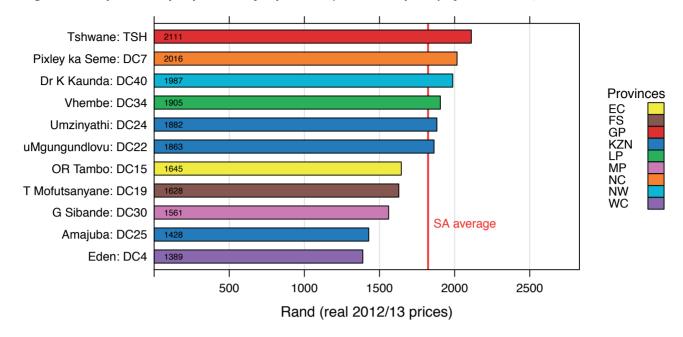


Figure 10: Expenditure per patient day equivalent (district hospitals) by NHI district, 2012/13

## Map 3: Expenditure per patient day equivalent (district hospitals) by district, 2012/13

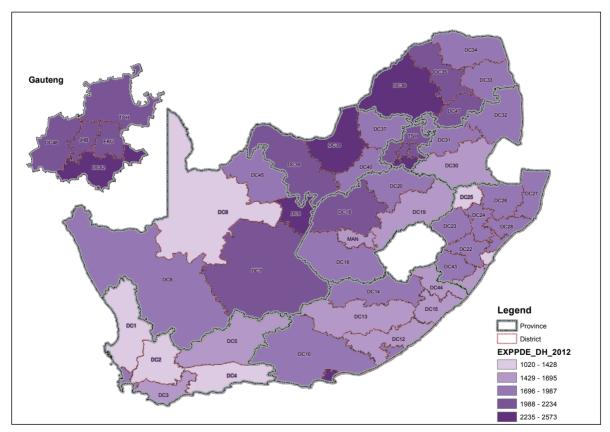
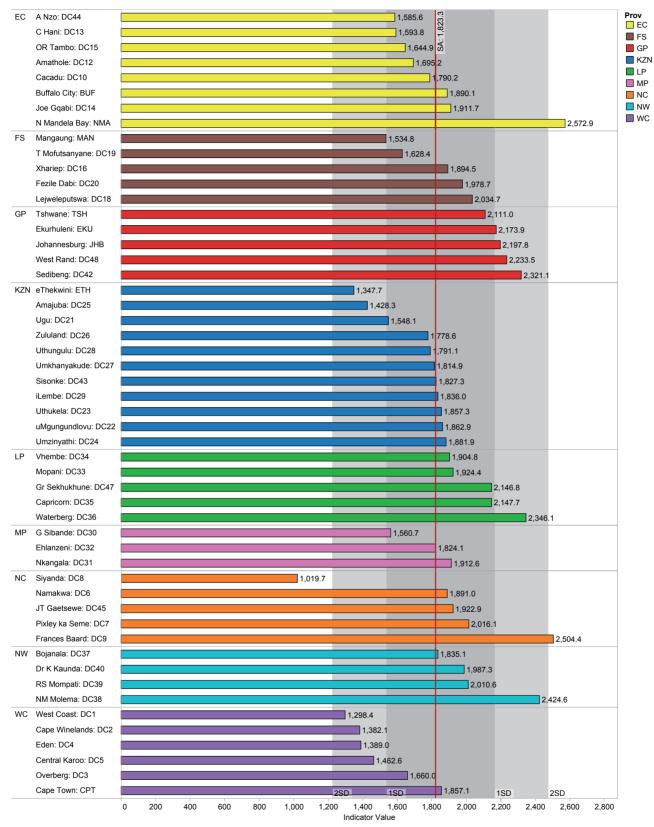
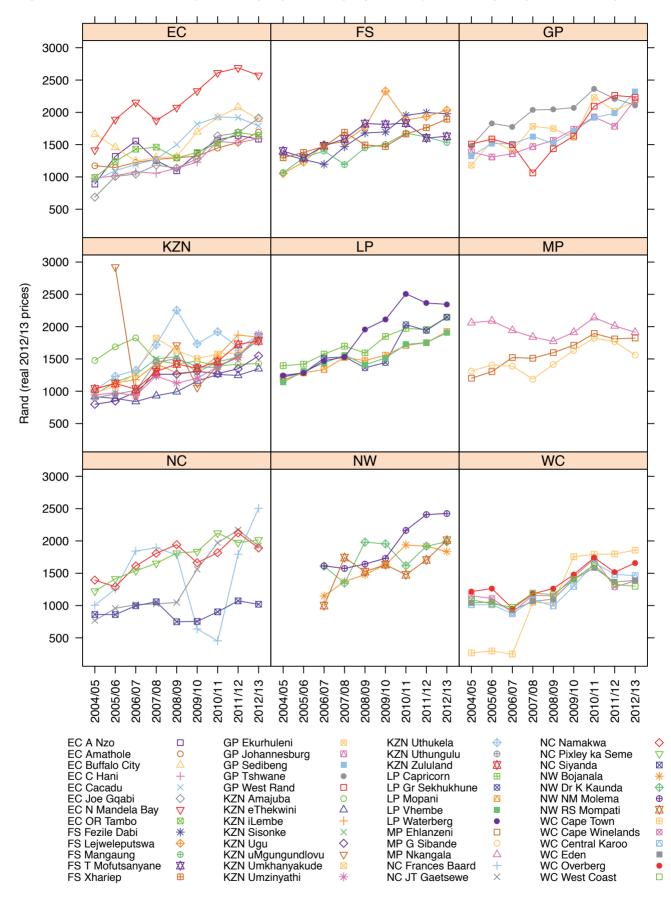


Figure 11: Expenditure per patient day equivalent (district hospitals) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Rand (real 2012/13 prices) Source: BAS, DHIS





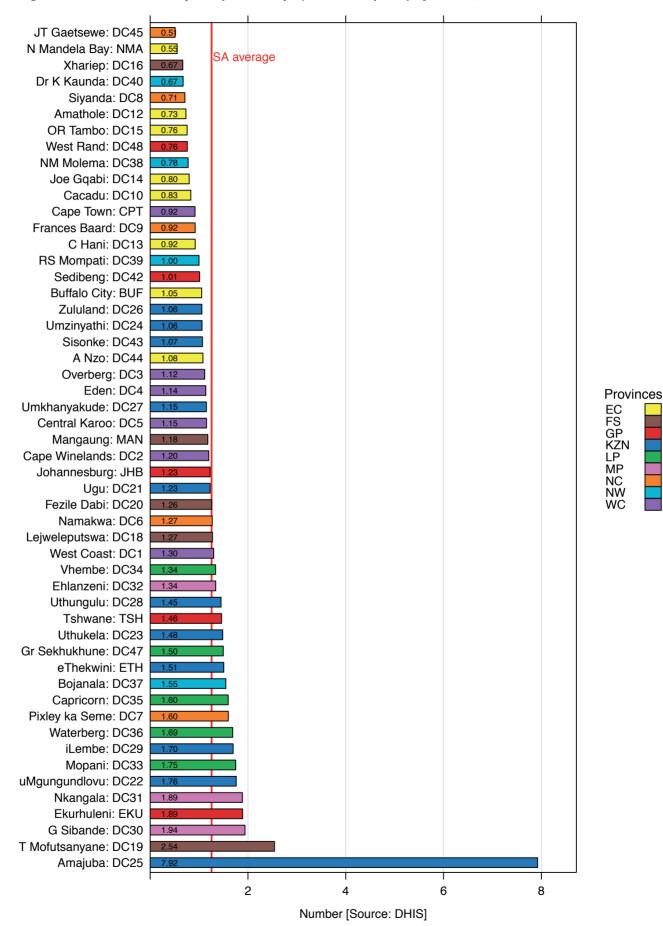
# 3.4 Ratio ambulatory to inpatient days

This indicator is new in the profile of DHB reporting, and compares outpatient visits with inpatient days (including half of day patients). The indicator is calculated by dividing the total Outpatient Department (OPD) headcount (including emergencies) – as the numerator – by the sum of the total inpatient days plus 50% of the total day patients, which constitutes the denominator. A value greater than 1 would indicate that more outpatient and casualty patients are seen than are those who are admitted.

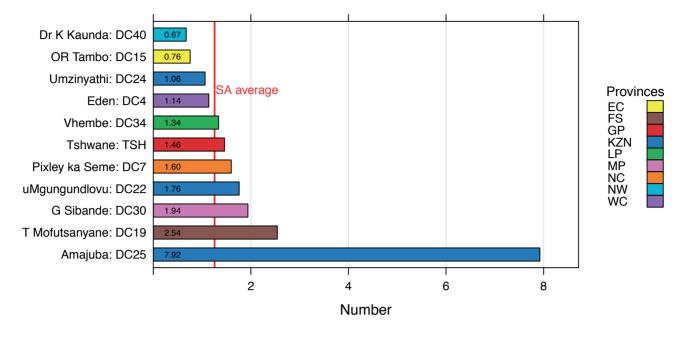
In an ideal setting, all patients coming to the OPD should be referred from a PHC facility. In some cases, hospitals even have clinics on their premises or very close by, known as gateway clinics, to provide a filtering service and prevent unreferred patients from arriving in the OPD. Therefore, a lower ratio is relatively better than a higher ratio.

The 2012/13 value for ratio of ambulatory to inpatient days was 1.3. This means that there are 1.3 times more OPD and casualty patients than there are patient days. The highest ratio (7.9) is Amajuba (KZN) which is a clear outlier and requires further investigation of the one hospital in the district. The lowest ratios were found in JT Gaetsewe (NC) 0.5 and Nelson Mandela Bay (EC) 0.6.

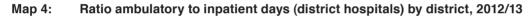
With this indicator there will be intra- and inter-provincial variation because district hospitals provide different levels of care. A ratio below 1 means that fewer clients were seen at the emergency unit/OPD clinics than were admitted into hospital. For example in the Cape Town Metro the larger district hospitals provide a significant quantum of level 2 services which impacts on inpatient days.

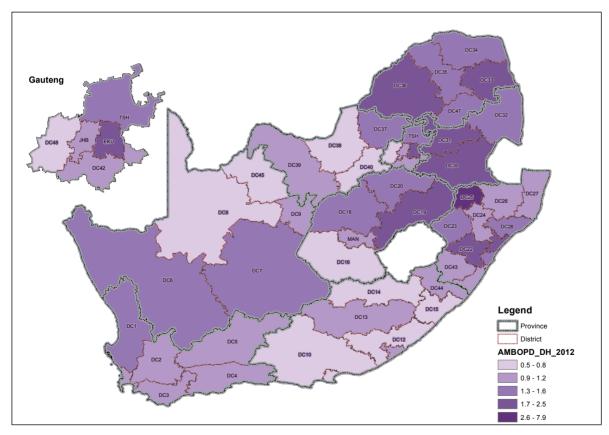




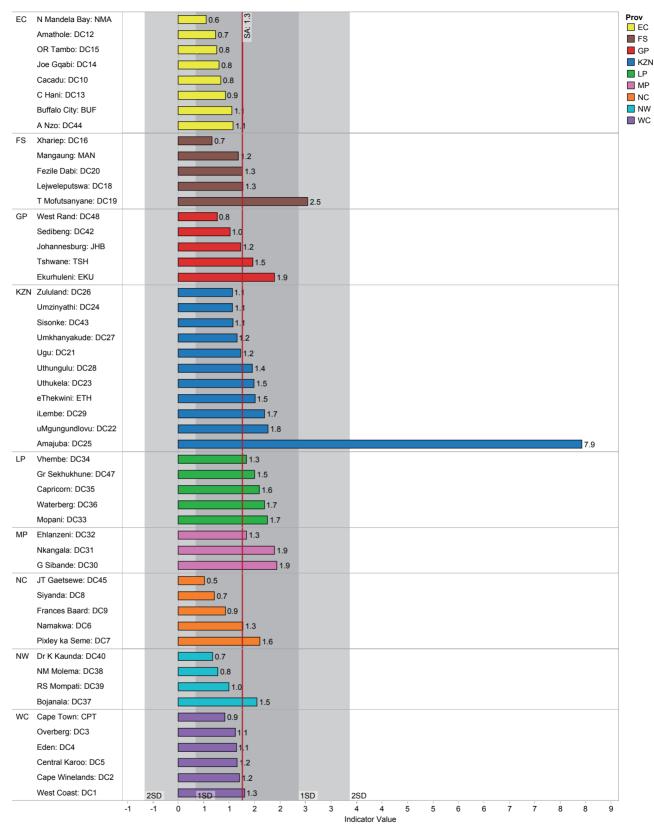


#### Figure 14: Ratio ambulatory to inpatient days (district hospitals) by NHI district, 2012/13



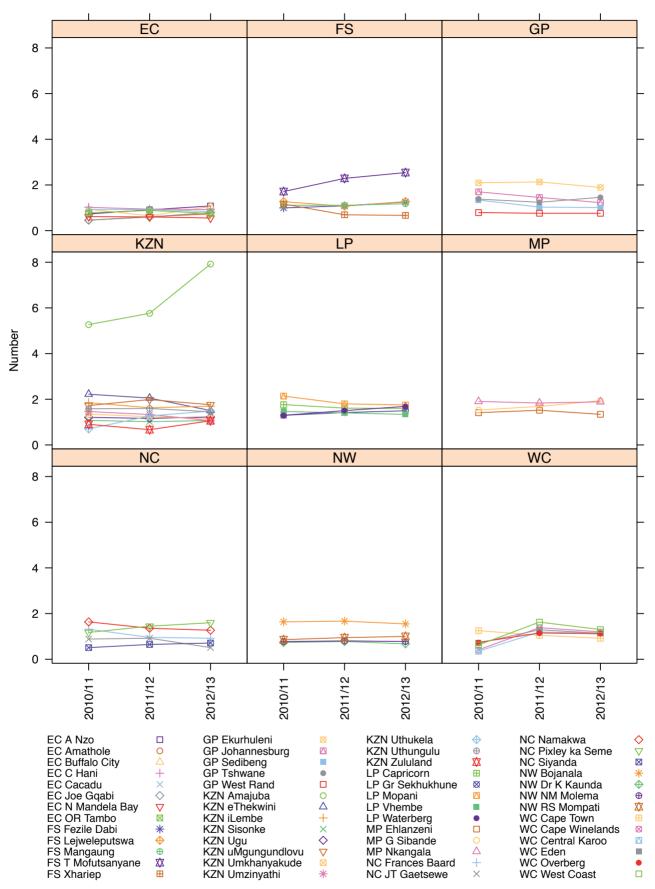


# Figure 15: Ratio ambulatory to inpatient days (district hospitals) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Number Source: DHIS





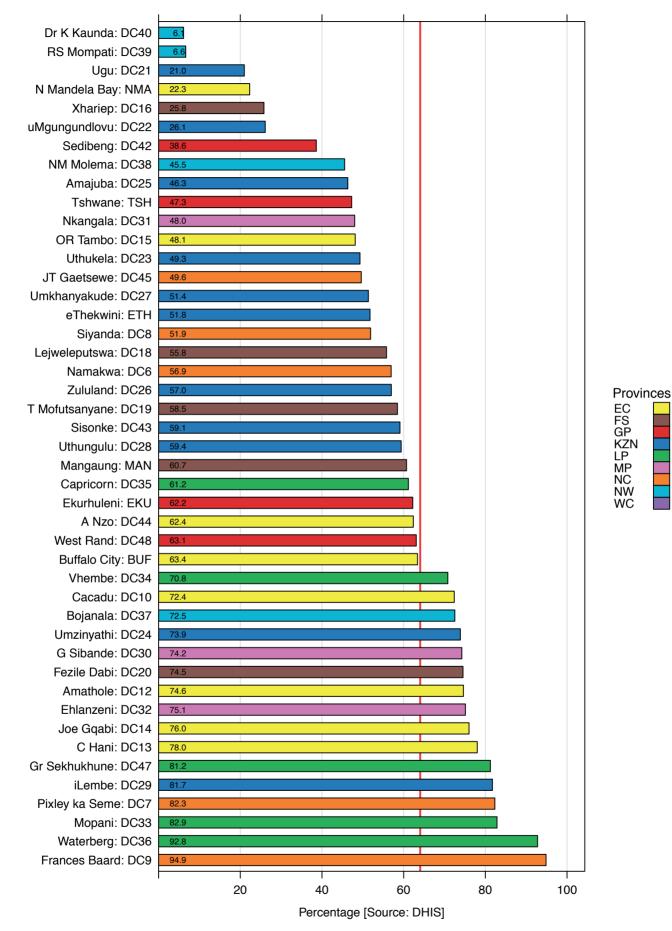
# 3.5 OPD new client not referred rate

This indicator is new and refers to the proportion of new outpatient clients who enter a hospital without a referral letter. OPD new client not referred rate is a percentage of the new OPD cases that are not referred (numerator) divided by all new OPD cases (denominator). OPD follow-up and emergency clients are excluded from the denominator. OPD new client not referred rate monitors utilisation trends of clients' by-passing PHC facilities. There is no target set for this indicator.

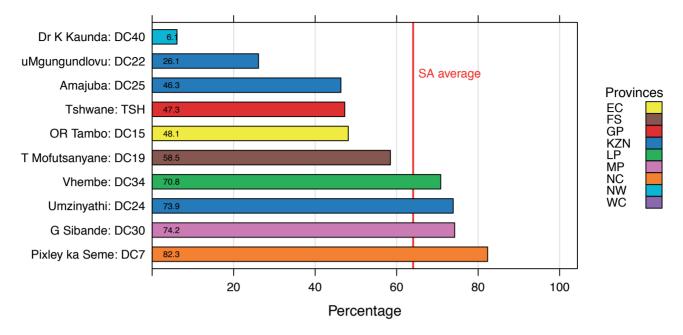
In 2012/13 the average OPD new client not referred rate was 64.1% (Figure 17). The highest was Frances Baard (NC) with 94.9% and the lowest was Dr K Kaunda (NW) with 6.1%. There are no distinct provincial patterns. However the Gauteng districts do not exceed 63.1% and the Limpopo districts in contrast do not drop below 61.2%. There are no values for the WC for OPD new client not referred rate.

There are substantial intra- and inter-provincial variations. High OPD new client not referred rate values could imply overburdened primary health care facilities or inadequately performing ones resulting in poor referral systems. Long queues and lack of faith in nursing staff could also motivate clients to attend hospital OPDs without consulting a primary health care facility first.

Four of the NHI districts have OPD new client not referred rate values greater than the average. This is important particularly because this indicator will highlight the effect of PHC re-engineering on OPD utilisation. If PHC improves, then this value should ideally decrease. This value will be closely monitored over the next few years and should provide key evidence as to how the re-engineering process is evolving.

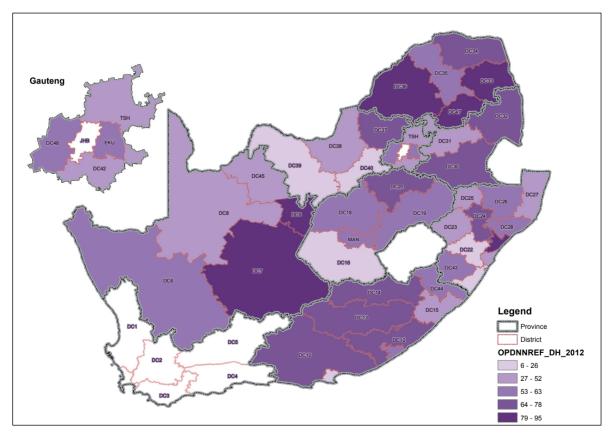


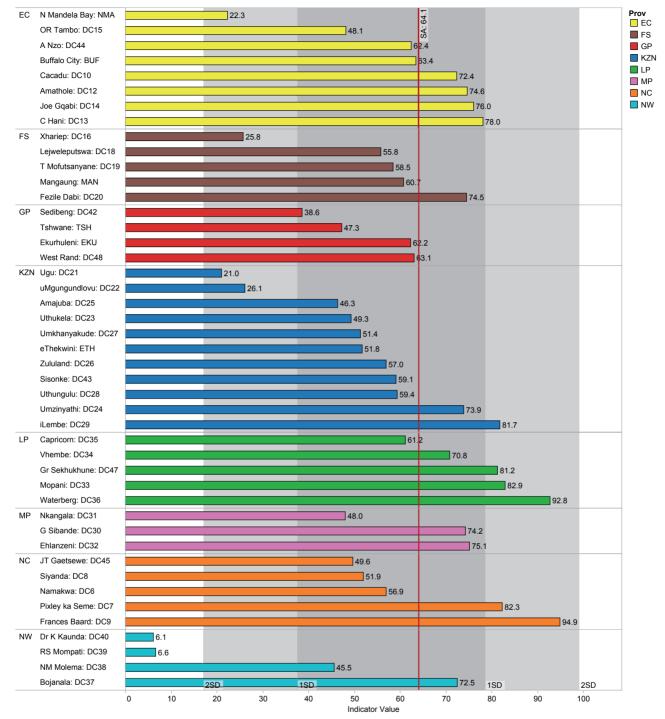
#### Figure 17: OPD new client not referred rate (district hospitals) by district, 2012/13

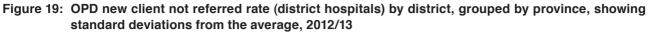


#### Figure 18: OPD new client not referred rate (district hospitals) by NHI district, 2012/13

## Map 5: OPD new client not referred rate (district hospitals) by district, 2012/13







Units: Percentage Source: DHIS

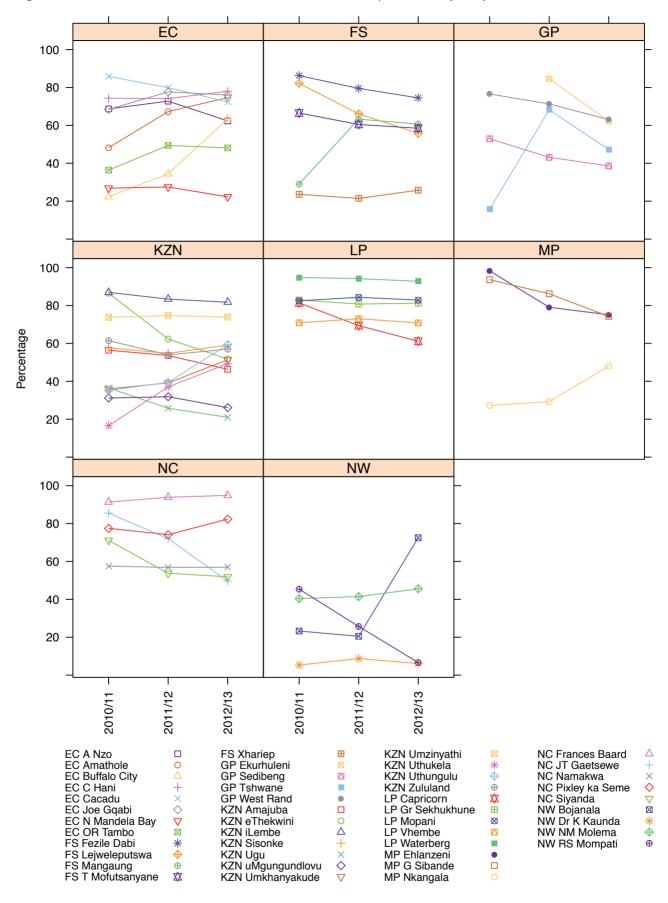


Figure 20: Annual trends: OPD new client not referred rate (district hospitals)

## 4 Delivery

## Nienke van Schaik

This chapter covers several aspects of maternal health related to delivery as well as indicators of obstetric and intra-partum care. The following indicators are presented: delivery rate in facility under 18 years, Caesarean section rate, stillbirth in facility rate, inpatient early neonatal death rate, and facility maternal mortality ratio. In 2012/13, the District Health Information System (DHIS) recorded 947 395 deliveries, 940 051 live births and 20 978 stillbirths.<sup>a</sup>

## 4.1 Delivery rate in facility under 18 years

The delivery rate in facility under 18 years indicator measures the proportion of all deliveries that occur in women younger than 18 years. The numerator is the number of deliveries in women under 18 years of age, while the denominator represents all deliveries that have been recorded at health facilities. This outcome indicator is used as a proxy to track success in the prevention of teenage pregnancies and improvements in maternal health as outlined in Millennium Development Goal 5b.<sup>b</sup> Teenagers are at high risk of dying from eclampsia and pre-eclampsia,<sup>c</sup> and there are long-term socio-economic consequences of unplanned and unwanted pregnancies. The promotion of contraceptive services (including reproductive health matters) among teenagers is therefore strongly encouraged.<sup>b</sup> The Minister of Health, Dr Aaron Motsoaledi, has mandated that sexual and reproductive health services be part of the Integrated School Health Programme in order to address the issue of teenage pregnancies.<sup>d</sup>

Overall, the proportion of under-18 deliveries in facilities is declining, having dropped from 9.2% in 2007/8 to 7.7% in 2012/13. Provincially, the highest proportion of 2012/13 under-18 deliveries was in the Eastern Cape (EC) (10.3%) and the lowest in Gauteng Province (4.8%). With the exception of the Northern Cape (NC), which reports a slight increase to 10.2%, the rates are stable or declining.

The majority of deliveries in girls under the age of 18 take place at district hospitals (49.5%) followed by regional hospitals (24.6%) and community health centres (10.5%).

The delivery rate in facility under-18 years at district level (Figure 1) ranged from 4.0% in Johannesburg (GP) to 13.4% in Alfred Nzo (EC). The second highest was OR Tambo (EC) at 12.9%. The rate has dropped in Siyanda (NC) from 16.3% in 2011/12 when it was highest overall, to 11.8% in 2012/13 which is in line with trends reported prior to 2011.

The majority of the 11 NHI pilot districts (Figure 2) have under-18 delivery rates higher than the national average, and three have rates above 10%.

An overview of annual trends for the provinces (Figure 4) shows that in Gauteng, there is a strong downward trend. This is less marked in the other provinces, where certain districts show fluctuating trends. The greatest percentage increases were in JT Gaetsewe (NC), Umzinyathi (KZN), Umkhanyakude (KZN), Amajuba (KZN) and Xhariep (FS).

Four of the metropolitan districts, three in Gauteng and one in the City of Cape Town (WC), have the lowest proportion of under-18 deliveries. This pattern has been similar over the past five years.

a Limited private sector data included.

b World Health Organization. The Millenium Development Goals Report 2012. Geneva: WHO; 2012.

c National Committee for Confidential Enquiry into Maternal Deaths. Saving Mothers 2008 – 2010. Fifth report on the Confidential Enquiries into Maternal Deaths in South Africa. Pretoria: National Department of Health; 2012.

d Opening Speech by the Minister of Health, Dr Aaron Motsoaledi, The South African AIDS Conference, Durban, 18 June 2013 (http://www.doh.gov.za/show.php?id=4305)

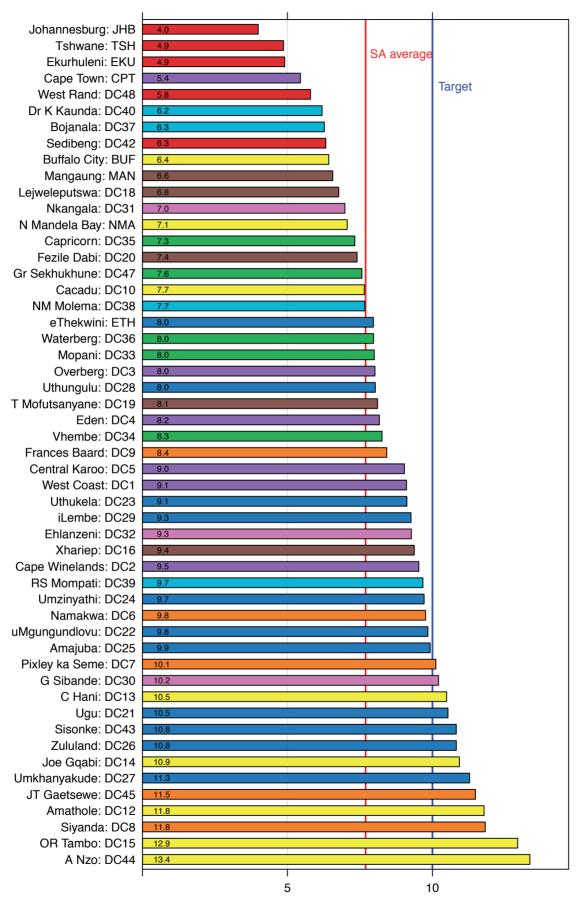


Figure 1: Delivery rate in facility under-18 years by district, 2012/13

Provinces

EC FS GP

KZN LP

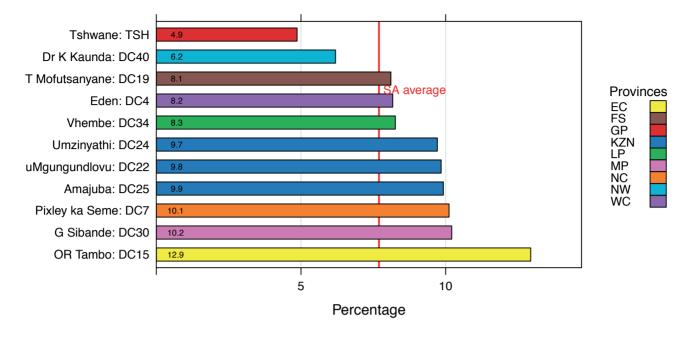
MP

NC

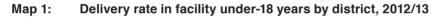
NW

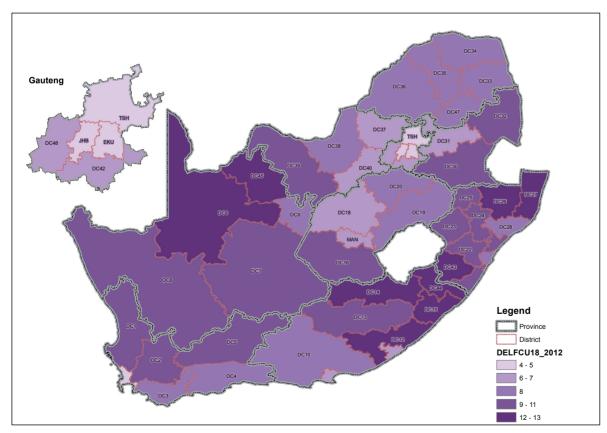
WC

Percentage [Source: DHIS]

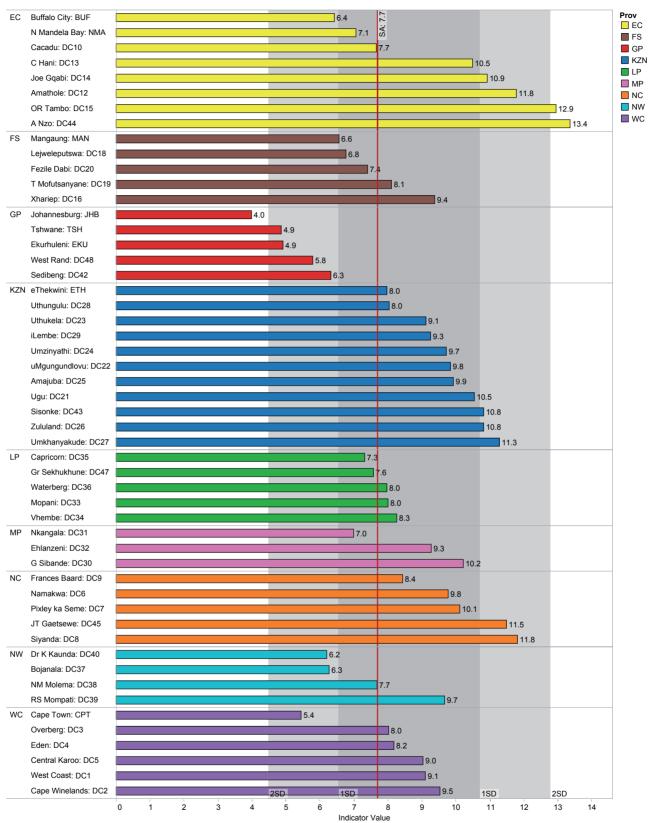


#### Figure 2: Delivery rate in facility under-18 years by NHI district, 2012/13



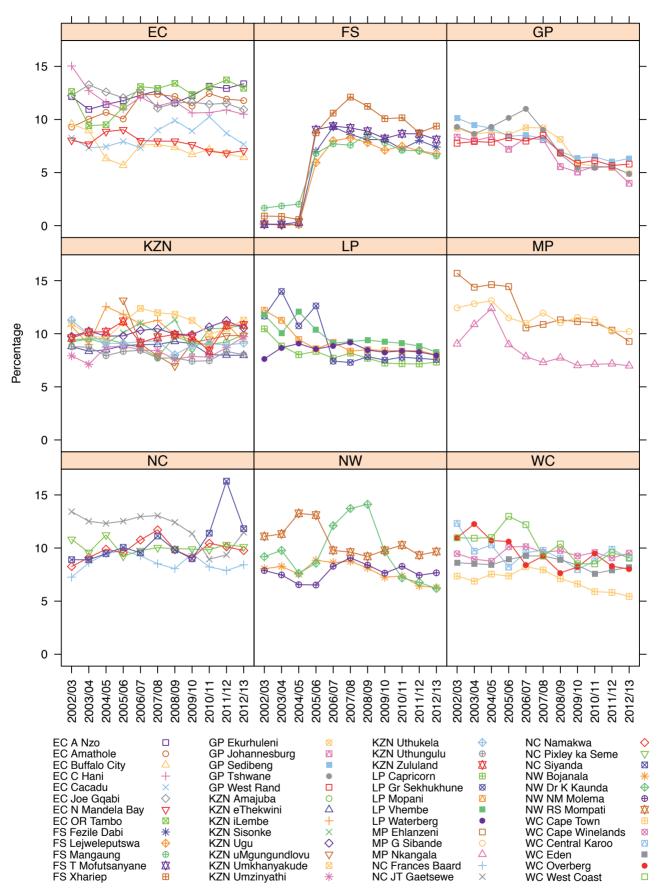


# Figure 3: Delivery rate in facility under-18 years by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: DHIS





## 4.2 Caesarean section rate

The Caesarean section (C-section) rate is an important indicator of access to essential obstetric care and is one of the key maternal health indicators used in the evaluation of safe motherhood programmes. As such, it feeds directly into one of the strategic goals of the health sector's Negotiated Service Delivery Agreement (NSDA), which is to decrease maternal and child mortality.

This indicator measures the proportion of births in district hospitals that are delivered by C-section and is thus a facilitybased and not a population-based indicator. The numerator is the number of C-sections conducted in the facility, and the denominator is the number of deliveries that took place in that facility.

It is important to note that routinely collected data, made available through the District Health Information System (DHIS), continues to be of variable quality, and missing numerators and denominators for a number of district hospitals over various years are observed, all of which affect the overall indicator values.

The national C-section rate has increased steadily from 12.7% in 2001/02 to 20.8% in 2012/13. Considerable variation exists between the provinces, with C-section rates ranging from 13.3% in the Northern Cape to 27.0% in KwaZulu-Natal. The Northern Cape showed a decrease from 13.7% to 13.3% in contrast to the rest of the provinces. Identifying the common indications for Caesarean section can lead to a better understanding of how to improve antenatal services, such as booking high-risk women for elective Caesarean sections and improving emergency obstetric care and associated transport systems.

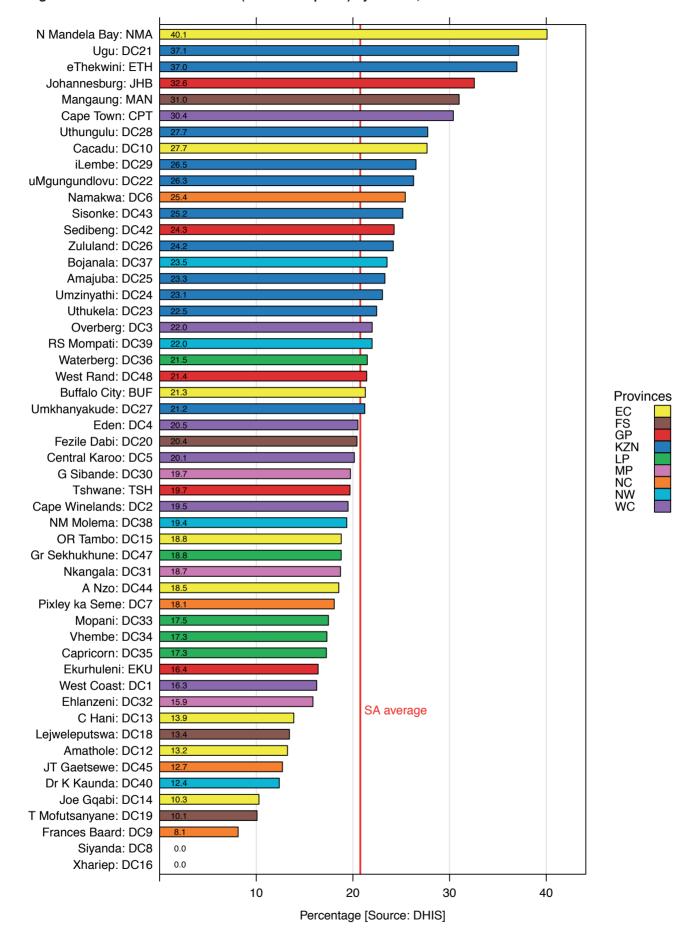
As illustrated in Figure 5, in which the districts are ranked from highest to lowest, the C-section rates varied from 40.1% in Nelson Mandela Bay (EC) to a low of 8.1% in Frances Baard (NC). Nelson Mandela Bay also had the highest rate in 2011/12.

Two districts reported no C-sections; these were Siyanda (NC) and Xhariep (FS). Very few deliveries are recorded in Xhariep as these are probably referred to Mangaung. In Siyanda, the C-section rate in regional hospitals was 25.5% in 2012/13.

The majority of NHI districts (Figure 6) had rates below the national average, and rates varied from 10.1% to 26.3%.

Annual trends can be seen in Figure 8. Seventeen districts showed a decrease; two had no Caesarean sections, and 33 districts showed an increase in C-section rates from 2011/12 to 2012/13. The greatest increases were recorded in Dr Kenneth Kaunda (NW) at 8.1 percentage points, and Mangaung (FS) at 5.4 percentage points, with the largest decreases being recorded in Frances Baard (NC) at 4.5 percentage points and Vhembe (LP) at 2.0 percentage points.

Figure 9 illustrates the proportion of deliveries that take place in the various health facility types. There is wide inter-district variation in this stratification with the proportion of deliveries at district hospitals ranging from less than 5% to 100%. The largest proportion of deliveries that take place at district hospitals is in Mpumalanga (60.0%) and the lowest is in Gauteng Province (20.0%). The highest C-section rate recorded was in KwaZulu-Natal at the national central hospital in eThekwini (79.8%), followed by the provincial tertiary hospital in uMgungundlovu (73.2%).



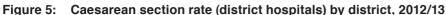
KZN

I P MP

NC

NŴ

WC



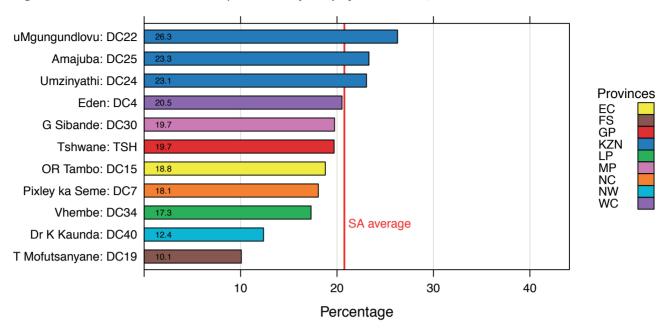
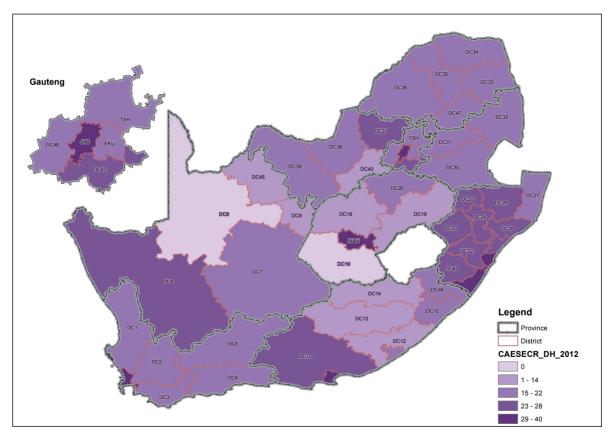
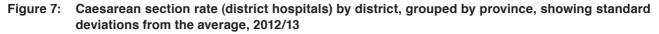
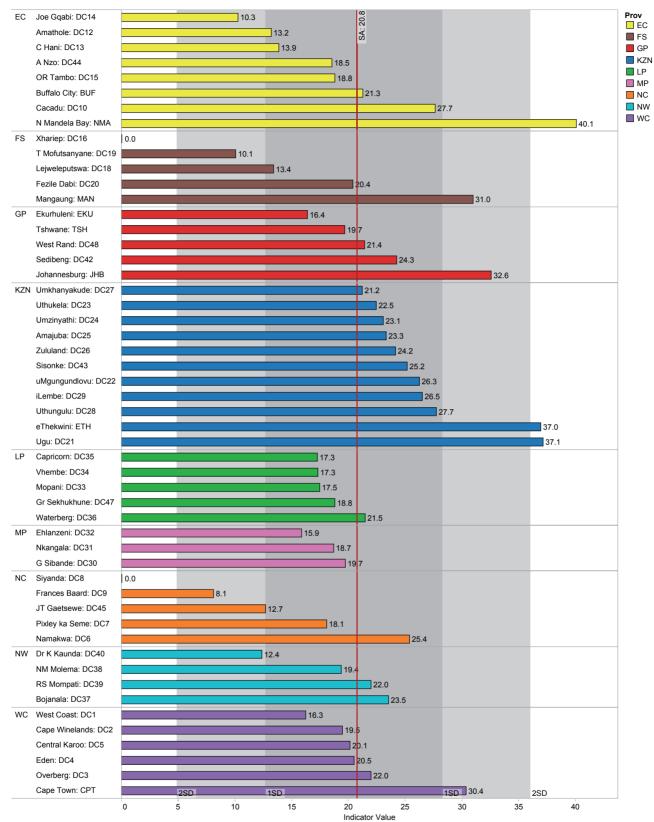


Figure 6: Caesarean section rate (district hospitals) by NHI district, 2012/13

### Map 2: Caesarean section rate (district hospitals) by district, 2012/13







Units: Percentage Source: DHIS

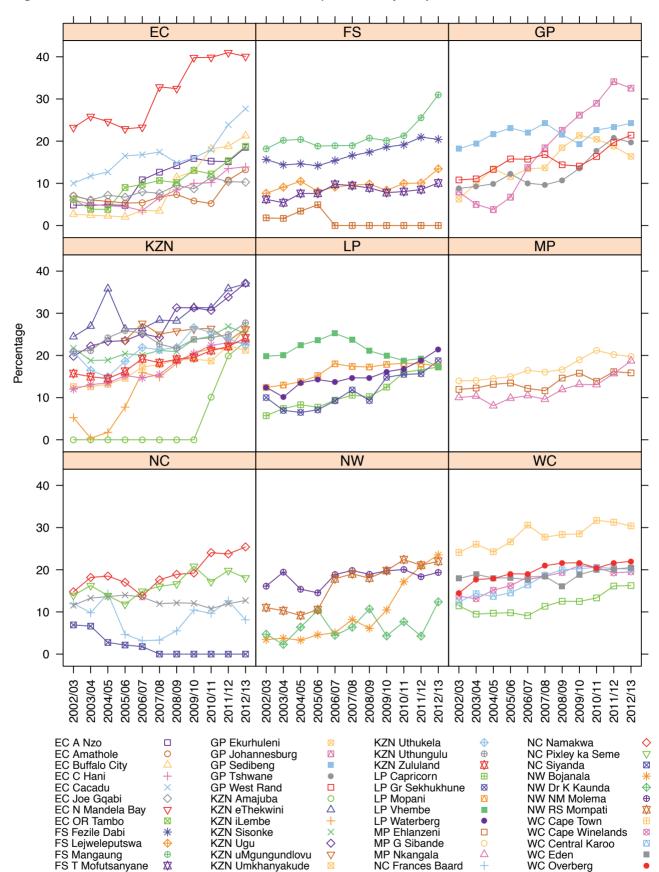


Figure 8: Annual trends: Caesarean section rate (district hospitals)

欫

⊞

FS Xhariep

KZN Umkhanyakude

KZN Umzinyathi

⊠

\*

NC Frances Baard

NC JT Gaetsewe

+

×

WC West Coast

•

Figure 9:	Caesarean section rate compared with number and percentage of deliveries by level of care,
	2012/13

		)12/13		
Prov EC	District A Nzo: DC44	18.5	11,559	91.2%
	Amathole: DC12	13.2	9,214	85.3% 13.5%
	Buffalo City: BUF	21.3 52.5	8,805	59.7% 14.1% 26.0%
	C Hani: DC13			
			8,420	
	Cacadu: DC10	27.7		96.7%
	Joe Gqabi: DC14	10.3		99.0%
	N Mandela Bay: NMA	40.1 55.6 70.2	6,798 6,622	20.0% <u>33.0%</u> 14.8% 32.2%
	OR Tambo: DC15	18.8 40.5	10,308 12,599	<u>31.7%</u> <u>17.6%</u> <u>38.8%</u> <u>11.2%</u>
FS	Fezile Dabi: DC20	20.4 32.4	<b>—</b>	27.7% 61.5% 10.8%
	Lejweleputswa: DC18	13.4 47.2		40.1% 51.6%
	Mangaung: MAN	31.0 65.2		<u>33.3%</u> <u>30.2%</u> 16.2% 16.8%
	T Mofutsanyane: DC19	10.1	8,661	28.1% 61.2%
	Xhariep: DC16			99.7%
GP	Ekurhuleni: EKU	16.4 30.4 45.1	42,056 12,998	69.4% 21.5%
	Johannesburg: JHB	40.2	31,122 16,313 17,219	46.0% 24.1% 25.4%
	Sedibeng: DC42	24.3 42.2 61.5		32.5% 37.9% 27.2%
	Tshwane: TSH	19.7 41.3	<b>13,117 21,856</b> 8,535	25.7% 11.8% 42.9% 16.7%
	West Rand: DC48	30.8	7,234 7,234	43.7% 43.7% 12.6%
KZN	Amajuba: DC25	28.9	7,678	87.5%
	eThekwini: ETH	40.1 79.8	36,540 11,063	61.7% 18.7%
	iLembe: DC29	30.5	6.221	<u>59.3%</u> 24.2% 12.9%
	Sisonke: DC43	25.2	8,479	97.7%
	Ugu: DC21	37.1 55.5	8,211	24.6% 61.0%
	uMgungundlovu: DC22	26.3 46.9 73.2	7,453 7,177	42.6% 41.0%
	Umkhanyakude: DC27	21.2	11,699	81.1% 18.9%
	Umzinyathi: DC24	23.1	11,050	95.7%
	Uthukela: DC23	26.9		<b>43.9% 39.4%</b> 13.4%
	Uthungulu: DC28	27.7 50.4	9,543 6.878	48.6% <u>35.0%</u> 12.3%
	Zululand: DC26	24.2	14,446	88.9%
LP	Capricorn: DC35	23.1	8,644 15,109	<u>30.8%</u> 53.9% 13.5%
	Gr Sekhukhune: DC47	18.8	8,190 14,134	32.3% 55.7% 10.9%
	Mopani: DC33	17.5 29.9	16,368	12.0% 61.0% 20.8%
	Vhembe: DC34	27.0	18,789 7,524	14.4% 57.0% 22.8%
	Waterberg: DC36	21.5	9,305	<b>16.8%</b> 62.8% 17.6%
MP	Ehlanzeni: DC32	25.3	8,145 23,251	11.4% 20.9% 59.7%
	G Sibande: DC30	21.2	13,357	15.3% 72.7% 11.4%
	Nkangala: DC31	18.7 33.9	9,976	22.0% 49.2% 28.8%
NC	Frances Baard: DC9	8.1		55.4% 13.9% 30.6%
	JT Gaetsewe: DC45	12.7		91.4%
	Namakwa: DC6	3.0 25.4	Ł	69.6% 30.1%
	Pixley ka Seme: DC7	0.2 18.1	<u>.</u>	59.3% 40.7%
	Siyanda: DC8	25.5	•	58.9% 26.5% 14.7%
NW	Bojanala: DC37	23.5 40.7	8,283	24.3% 16.9% 39.3% 14.0%
	Dr K Kaunda: DC40	12.4 39.6	7,323	56.4% 12.9% 25.2%
	NM Molema: DC38	19.4 45.0		21.4% 34.2% 26.8% 16.1%
	RS Mompati: DC39	22.0 37.8		13.3% 39.8% 34.4% 12.6%
WC	Cape Town: CPT	0.6 30.4 48.3	10,443 18,036 13,962 20,868	16.5% 28.5% 22.1% 33.0%
	Cape Winelands: DC2	28.9		50.2% 37.5% 12.3%
	Central Karoo: DC5	20.1	1,107	100.0%
	Eden: DC4	26.2		36.4% 63.6%
	Overberg: DC3	22.0		88.2% <mark>11.8%</mark>
	West Coast: DC1	<b>16.3</b>	4,953	100.0%
Oralin	iitType (group)	0 10 20 30 40 50 60 70 80 Indicator Value	0K 10K 20K 30K 40K 50K 60K 70 Denominator (number)	0% 20% 40% 60% 80% 100% % of denominator

OrgUnitType (group) Clinic & Special Clinic Community Health Centre Midwife Obstetrics Unit Other Bistrict Hospital Provincial Tertiary Hospital Specialised Hospital Private Hospital

## 4.3 Stillbirth rate in facility

The stillbirth rate is a good indicator of care during the third trimester and intrapartum period. It is therefore one of the key indicators for Maternal, Newborn, Child and Women's Health (MNCWH) as it is a reflection of foetal, maternal and health system factors.

The stillbirth rate measures the number of babies who are born dead per 1 000 total births. In the District Health Barometer (DHB), only the stillbirths that occur in health facilities are reflected, the majority being public health sector facilities along with a limited number of private hospitals and mobile clinics. Deaths outside of these services, such as in the community, are not taken into account.

A stillborn foetus might have been dead (in utero) for a while (macerated) or have died prior to birth (fresh). The indicator does not differentiate between fresh and macerated stillbirths. The national stillbirth rate was 21.8 per 1 000 total births, representing a slight decrease from the 2011/12 rate of 22.5 per 1 000 total births. This is the lowest rate since 2001/02. The greatest decline was in the Free State (from 29.1 to 25.1). The rate increased in Limpopo, Mpumalanga and the Northern Cape, with the latter having the highest rate overall at 25.3 per 1 000 total births.

Figure 10 shows the stillbirth rates in facilities at district level. There is a 2.5-fold difference between the best and the worst performing districts, with Pixley ka Seme (NC) the lowest at 13.2 per 1 000 total births and the Central Karoo (WC) the highest at 33.5 per 1 000 total births. The rate in the Central Karoo doubled from its value last year and is the highest since 2000/01.

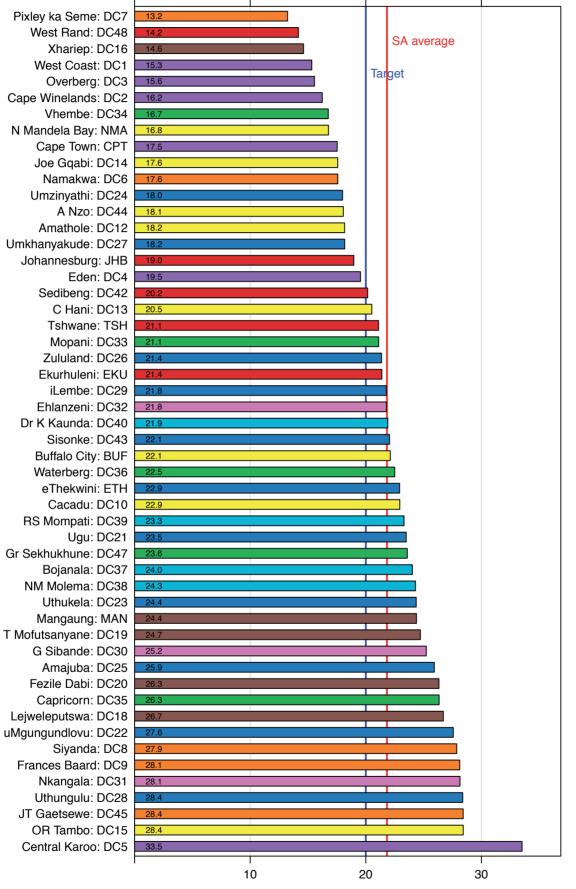
The stillbirth rate is highest at provincial tertiary hospitals (41.6), followed by national central hospitals (34.4) and regional hospitals (26.9). Complicated pregnancies and prolonged or difficult labour are the most likely reasons for the higher rates at referral hospitals. At district hospitals, where the greatest proportion of deliveries take place, the stillbirth rate is 20.3 per 1 000 total births.

There is a wide variation in the NHI districts (Figure 11) with Pixley ka Seme (NC) having the lowest rate and OR Tambo (EC) the highest.

The annual trends are shown in Figure 13. The rate decreased in all districts in the Free State and North West.

Map 3 shows the variations in stillbirth rates across neighbouring districts.





Provinces

EC FS GP

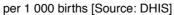
KZN

MP

NC

NW

WC



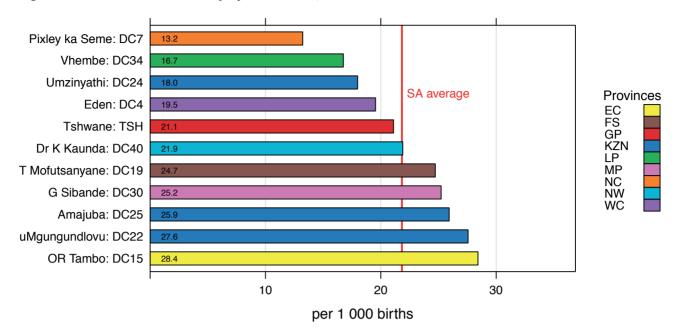
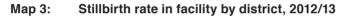
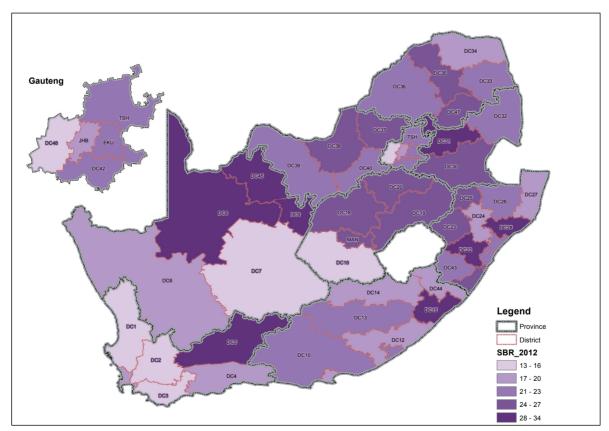
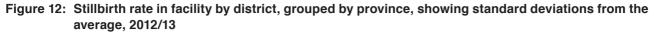
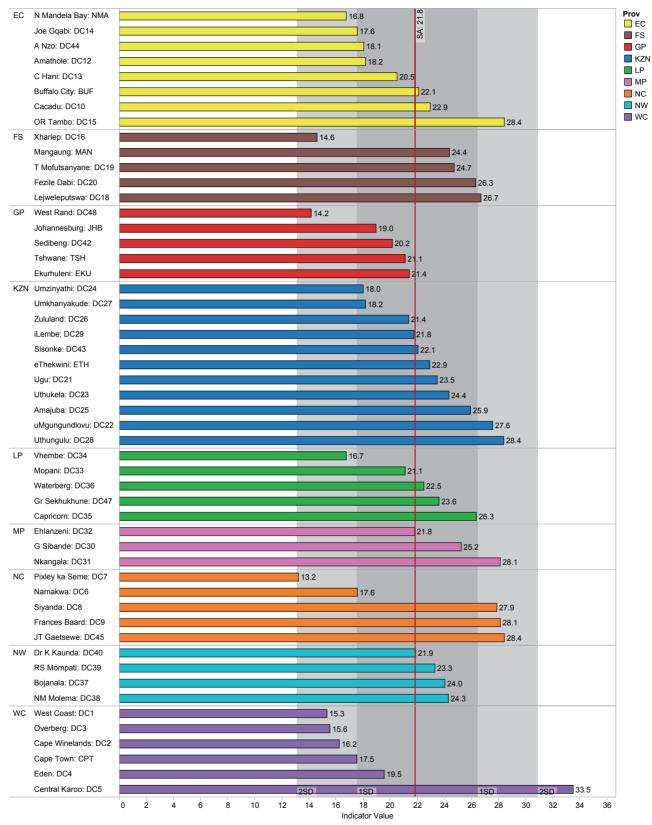


Figure 11: Stillbirth rate in facility by NHI district, 2012/13

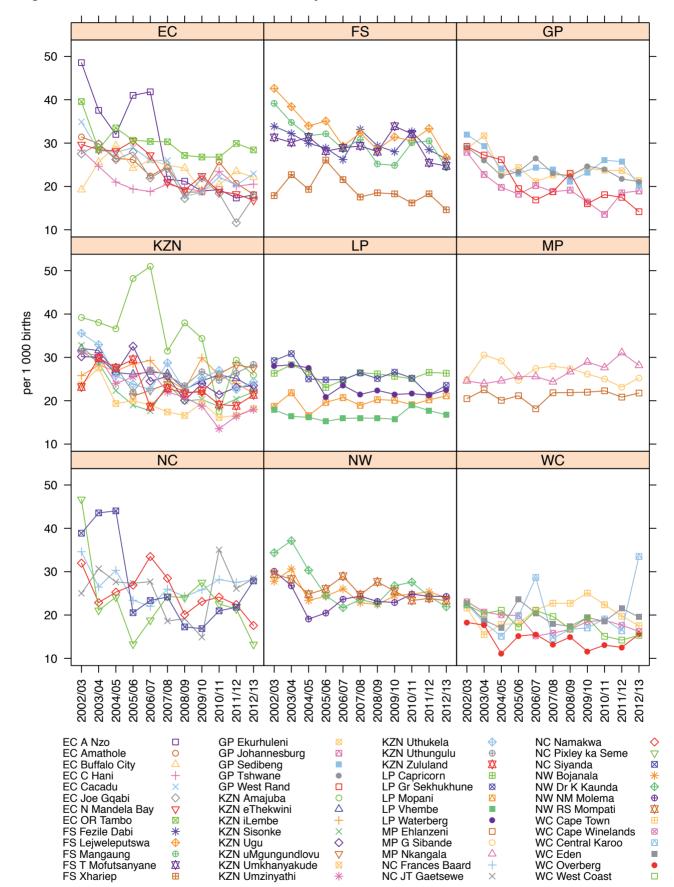








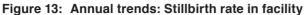
Units: per 1 000 births Source: DHIS



\*

X

NC JT Gaetsewe



FS T Mofutsanyane

FS Xhariep

XX

⊞

•

## 4.4 Inpatient early neonatal mortality rate in facility

The inpatient early neonatal mortality rate provides an indication of the quality of antenatal, intrapartum and postnatal care. It is also a significant contributor to the under-5 mortality rate and is a key indicator to address in order for South Africa to meet its MDG targets.

The inpatient early neonatal death rate measures the number of neonatal deaths that occur within seven completed days after birth per 1 000 live births. In the DHB, only the deaths that occur in health facilities are reflected, predominantly public health facilities but including a limited number of private hospitals. Deaths occurring at home are not included.

The 2012/13 South African inpatient early neonatal death rate has remained static at 10.2 per 1 000 live births compared to 2011/12, having increased from 8.7 per 1 000 live births in 2007/08. The latter figure is probably based on inadequate data collection rather than there being a real increase over the last five years.

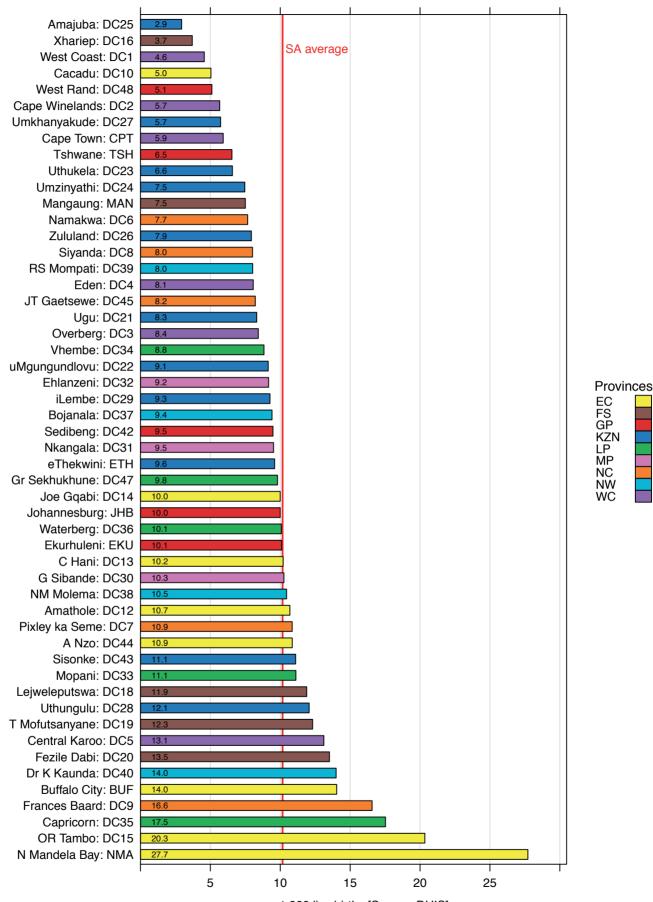
There was a wide range in provincial inpatient early neonatal death rates, from 6.2 in the Western Cape to 16.4 in the Eastern Cape, which is a 2.6-fold difference. Between 2011/12 and 2012/13, rates increased in the Eastern Cape (from 14.5 to 16.4), Limpopo (from 11.0 to 11.5) and the Western Cape (from 5.1 to 6.2). The remaining provinces showed decreases, with the Northern Cape showing the greatest decline (from 13.0 to 11.7).

Figure 14 shows the inpatient early neonatal death rate by district. There is a massive 9.5-fold difference between the highest and lowest rates, namely Nelson Mandela Bay (EC) at 27.7 and Amajuba (KZN) at 2.9 per 1 000 live births.

There is a wide variation in the NHI districts (Figure 15) with Amajuba (KZN) having the lowest rate and OR Tambo (EC) the highest.

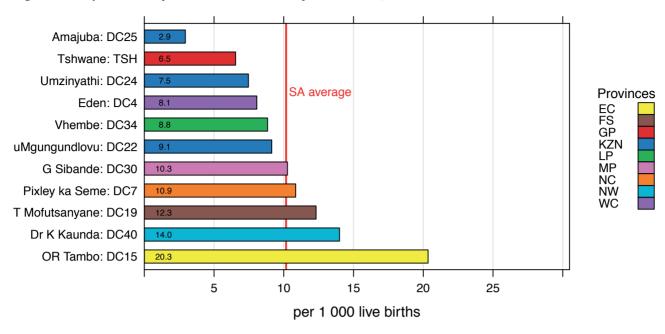
Annual trends are shown in Figure 17 and display wide variations from year to year, probably due to data quality issues. Thirty-two districts showed a decline from 2011/12 to 2012/13. In 18 districts, this decline represented more than one neonatal death per 1 000 live births. Pixley ka Seme showed the greatest improvement, dropping from 19.4 to 10.9 per 1 000 live births, while Nelson Mandela Bay increased from an already high 17.2 to 27.7 per 1 000 live births.

The inpatient early neonatal death rate was highest at provincial tertiary hospitals at 32.3 per 1 000 live births, followed by national central hospitals at 15.2. The rate at district hospitals was 9.2 per 1 000 live births.



#### Figure 14: Inpatient early neonatal death rate by district, 2012/13





#### Figure 15: Inpatient early neonatal death rate by NHI district, 2012/13



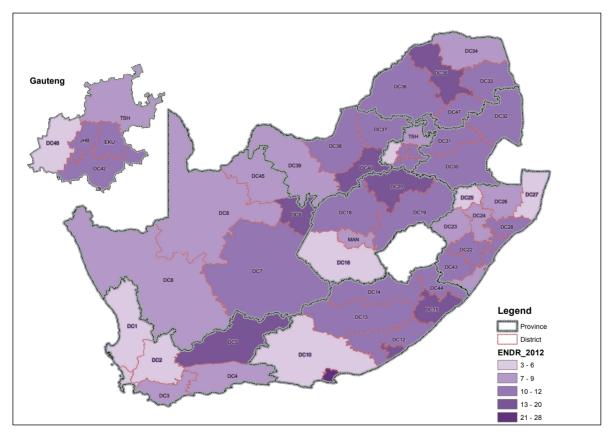
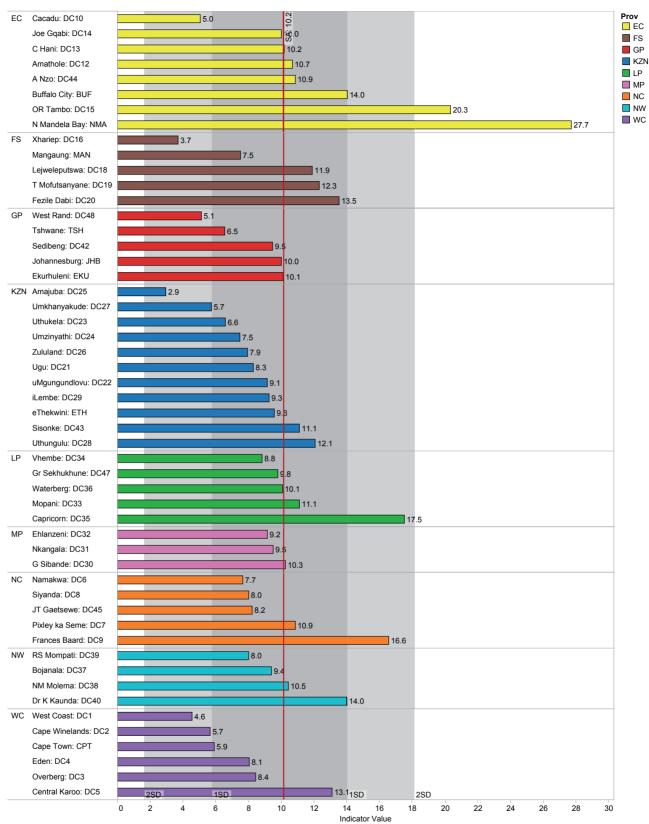
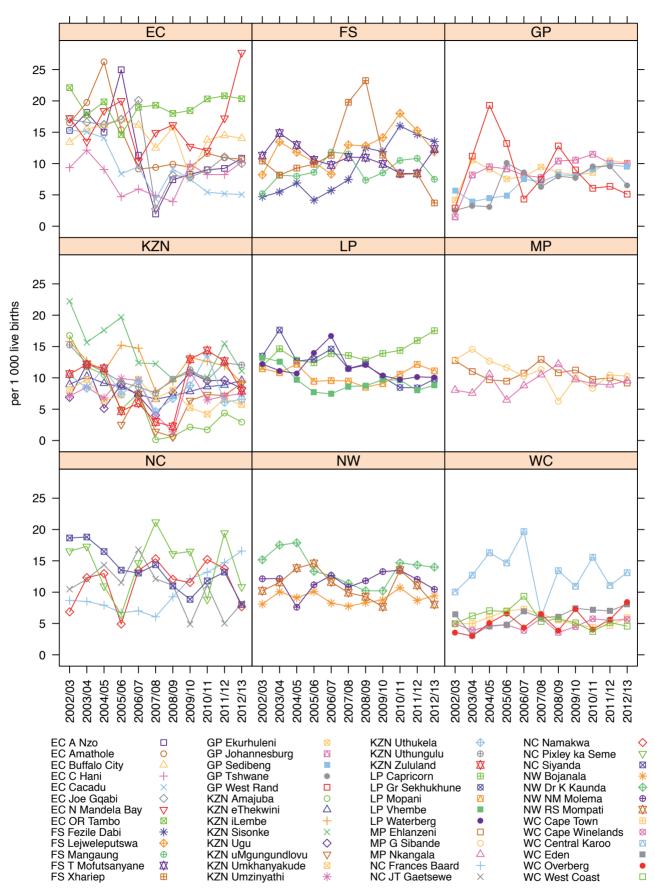


Figure 16: Inpatient early neonatal death rate by district, grouped by province, showing standard deviations from the average, 2012/13



Units: per 1 000 live births Source: DHIS





80

## 4.5 Maternal mortality ratio in facility

The World Health Organization (WHO) definition of a maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes. The maternal mortality ratio (MMR) is the number of maternal deaths per 100 000 live births.<sup>e</sup>

According to Millennium Development Goal 5,<sup>f</sup> South Africa should aim to reduce the MMR by three quarters, between 1990 and 2015. The reduction of the MMR is a priority area in the Negotiated Service Delivery Agreement (NSDA and a key component of the Strategic Plan for Maternal, Neonatal, Child and Women's Health (MNCWH) and Nutrition in South Africa – 2011-2016. South Africa has adopted the Campaign on Accelerated Reduction of Maternal and Child Mortality (CARMMA) strategy, and action components of this strategy mirror key priorities outlined in the Strategic Plan for MNCWH.

Successive reports from the National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD)<sup>c</sup> have identified key causative factors and appropriate interventions to reduce maternal mortality. However, the effective implementation of these has yet to be realised.

The MMR can be calculated in various ways. The population-based MMR is estimated from the vital registration system and includes all registered maternal deaths regardless of the place of death.<sup>9</sup> The facility-based MMR measures maternal deaths occurring in health facilities, primarily in the public sector, and can be calculated from two sources, namely the District Health Information System (DHIS) and the NCCEMD. The NCCEMD MMR values are currently higher than those in the DHIS in most areas, presumably since the NCCEMD is a well-established system with a strong regulatory framework, whilst the DHIS is only approaching completeness in terms of reporting for this indicator. DHIS data are available monthly, whereas the NCCEMD has been published only every three years with a time-lag. With DHIS information being available more timeously and with disaggregation to facility level, it may become a better method of monitoring progress.

In the 2011/12 DHB, we reported that nationally there had been a steady increase in the facility MMR recorded in the DHIS (144.9 per 100 000 live births) but that this was likely to have been due to more complete reporting in the DHIS between 2007/08 and 2011/12. In 2012/13, there was a decrease in the facility MMR from 144.9 to 132.9 per 100 000 live births.

According to the NCCEMD data, the 2010 MMR was 182.8 per 100 000 live births, a decrease from the MMR of 189.5 in 2009. Draft information released on the 2011 NCCEMD data indicates a further decline in the institutional MMR to 153 per 100 000 live births,<sup>h</sup> largely as a result of deaths linked to HIV infection.

Provincially, the facility MMR recorded in the DHIS for 2012/13 ranged from 8.7 per 100 000 live births in the Western Cape to 177.9 per 100 000 live births in Limpopo. Mpumalanga was the only province to show an increase in the facility MMR, that being from 135.0 in 2011/12 to 175.8 in 2012/13, whilst the remainder all showed a decrease.

The facility MMR recorded in the DHIS by district (Figure 18) ranged from 6.4 per 100 000 live births in Cape Town (WC) to 292.2 per 100 000 live births in Capricorn (LP). Capricorn also had the highest MMR in 2011/12 at 354.2 and thus showed a decrease in the past year. Five districts reported no maternal deaths, namely Central Karoo (WC), Overberg (WC), Cape Winelands (WC), Xhariep (FS) and Namakwa (NC).

Five of the 11 NHI districts (Figure 19) have facility MMR above the national average, with uMgungundlovu has the second highest facility MMR in the country at 279.4 per 100 000 live births.

Nineteen districts showed an increase in facility MMR from 2011/12 to 2012/13. Maternal mortality is a relatively rare event and, therefore, year-one-year fluctuations, especially in districts with small populations, must be treated with caution until there is a much longer time series of data available (Figure 21).

The maternal mortality in facility ratio was lower for metropolitan districts than for other district types and was lowest in the districts in the highest socio-economic quintiles.

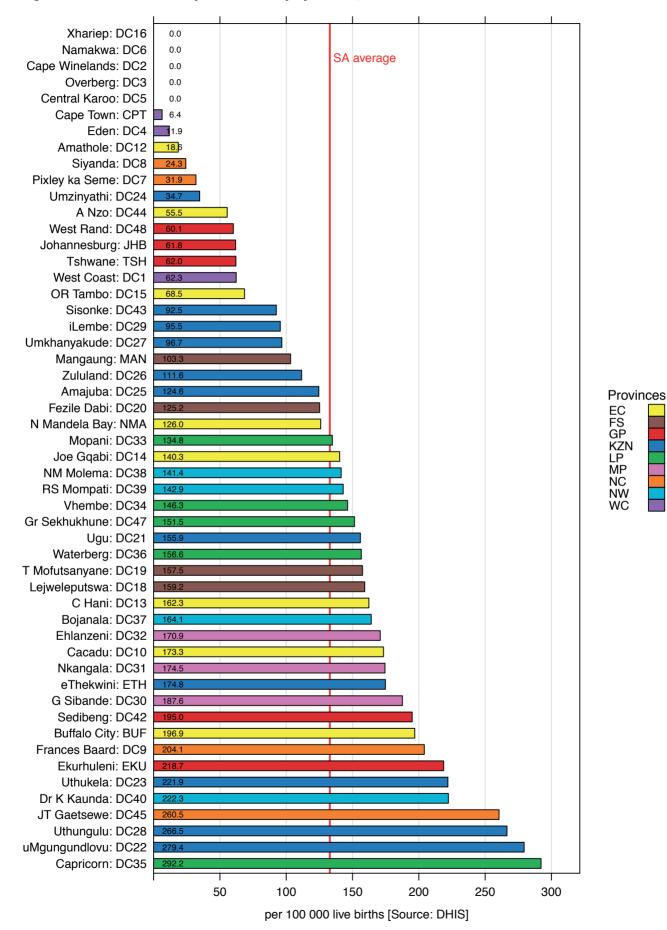
When looking at facility MMR per district by level of care (Figure 22), the MMR was highest at national central hospitals in eThekwini (KZN) with 2 419.4 and in Mangaung (FS) with 1 702.1. This was followed by provincial tertiary hospitals in uMgungundlovu (KZN) with 1 355.4, and clinics and special clinics in Ehlanzeni (MP) with 1 087.0 maternal deaths per 100 000 live births. For the country overall, the highest facility MMR was in provincial tertiary hospitals. The majority of deliveries take place at district hospitals, whereas women with high-risk pregnancies deliver at national central and provincial tertiary hospitals, and women with complications that arise at lower levels of care are referred to these hospitals which accounts for the much higher MMRs being recorded at the national central and provincial level of facility.

e http://www.who.int/healthinfo/statistics/indmaternalmortality/en/

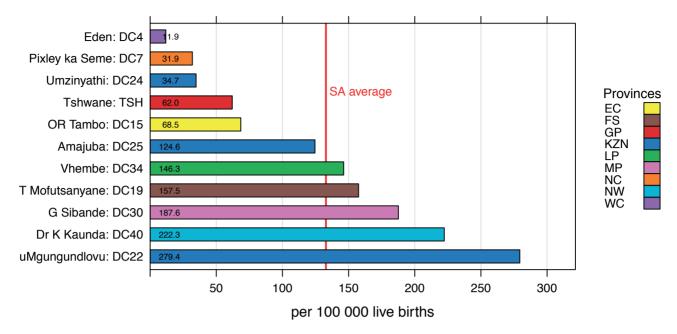
f World Health Organization. The Millenium Development Goals Report 2012. Geneva: WHO; 2012.

g Bradshaw D, Dorrington R, Laubscher R. Rapid Mortality Surveillance Report 2011. Cape Town: Medical Research Council; 2012.

h Burton R. Maternal health: There is cause for optimism. S Afr Med J. 2013 Jul 5;103(8):520-1.

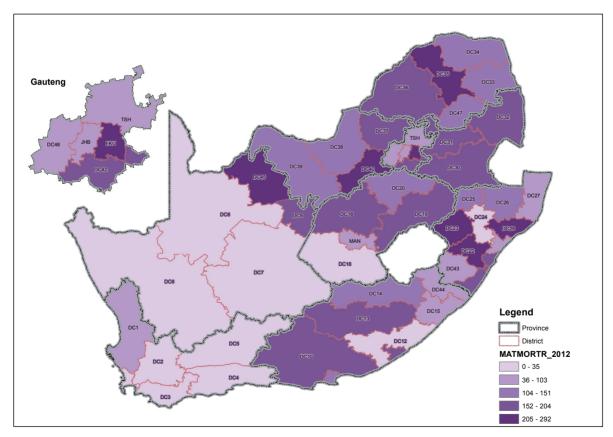


#### Figure 18: Maternal mortality ratio in facility by district, 2012/13

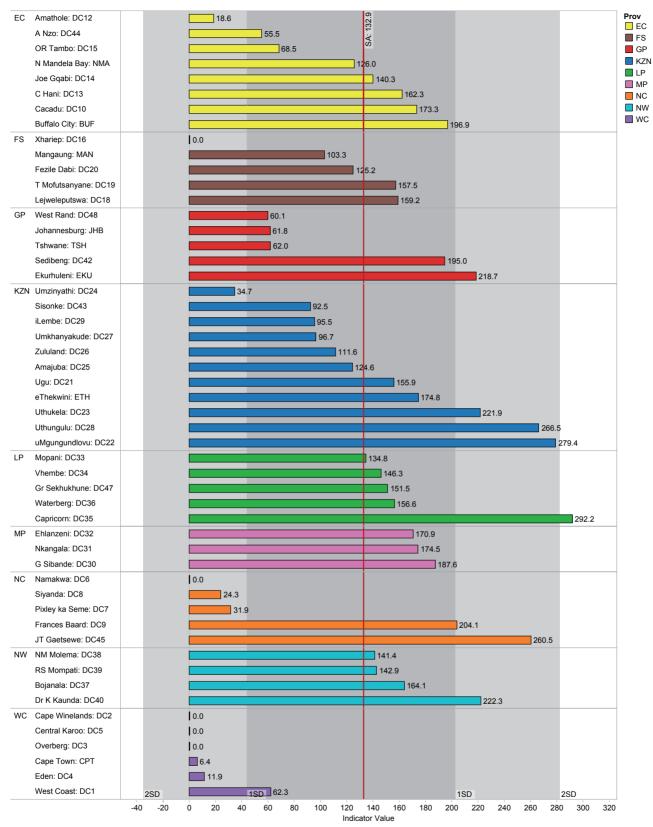




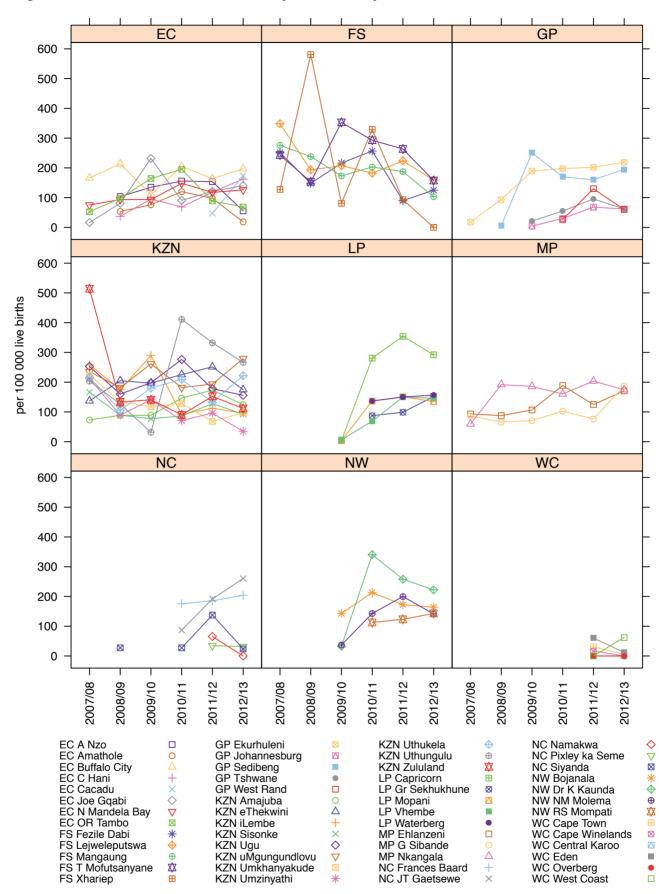
#### Map 5: Maternal mortality ratio in facility by district, 2012/13



# Figure 20: Maternal mortality ratio in facility by district, grouped by province, showing standard deviations from the average, 2012/13

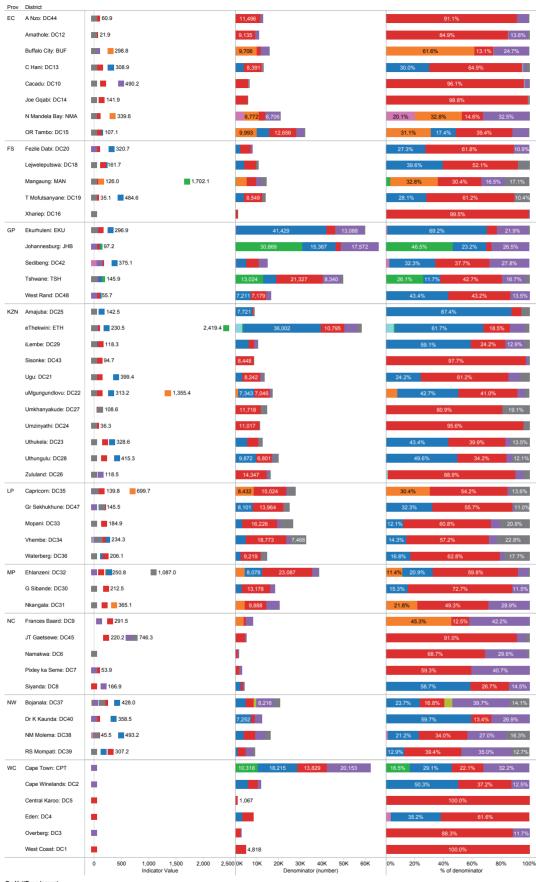


Units: per 100 000 live births Source: DHIS









#### OrgUnitType (group) Clinic & Special Clinic

Connuct & Special Clinic
Community Health Centre
Midwife Obstetrics Unit
Other

 Otner
 District Hospital
 Regional Hospital Provincial Tertiary Hospital

National Central Hospital
 Specialised Hospital
 Private Hospital

## 5 PMTCT Indicators

## Linda Mureithi and Gayle Sherman

South Africa has made huge strides in eliminating mother-to-child-transmission (MTCT) as evidenced by the significant reduction in MTCT reported in the 2011 Prevention of Mother-to-Child Transmission Study, more than halving the transmission rate from 8% estimated for 2008 to 2.7%.<sup>a</sup> In addition, there has been an integrated and concerted effort at all levels to reduce MTCT through high-level commitment to a number of strategic plans and action frameworks.<sup>b,c,d,e</sup> The recent global focus on elimination of new HIV infections and keeping mothers healthy has been adopted by the country through the National Action Framework for "no child born with HIV by 2015 and improving the health and wellbeing of mothers, partners and babies in South Africa". This Framework outlines a strategic, financial, management and monitoring plan that provides a clear roadmap for the operationalisation of an integrated PMTCT programme in line with key objectives in the National Strategic Plan (NSP) for HIV, STIs and TB (2012-2016).<sup>c</sup>

This chapter presents key national indicators used to assess the performance of the PMTCT programme, and includes data from the District Health Information System (DHIS), the National Health Laboratory Service (NHLS) and the National Antenatal Sero-prevalence Surveys. One new indicator included in the DHB this year is the antenatal client first visit before 20 weeks rate; which has been collected routinely in the DHIS since 2002.

Despite the success of the PMTCT programme thus far, there are still numerous challenges to implementation. Ensuring early antenatal clinic attendance, early infant diagnosis, integration of PMTCT services into routine health services, improving linkages to antiretroviral (ART) services for those diagnosed, as well as improving data quality and use, are important components that need improvement.<sup>f</sup> It is hoped that these renewed efforts at improving the PMTCT programme at all levels, in conjunction with the other health systems strengthening efforts currently being undertaken, will put the country on track to reaching the goal of eliminating MTCT.

## 5.1 Antenatal 1st visit before 20 weeks rate

Antenatal care services represent a key entry point for pregnant women to access HIV testing and therefore represent an important point in the PMTCT care continuum.<sup>g</sup> Antenatal HIV testing coverage has been virtually universal;<sup>f</sup> with both the South African PMTCT Evaluation study and DHIS data showing coverage of above 97% and 98% in 2011 respectively.<sup>a,h</sup> Early gestational age at first presentation not only provides an earlier opportunity to initiate the cascade of PMTCT services, but has also been found to be an important predictor for being on ART at the time of delivery.<sup>i</sup> The antenatal care coverage before 20 weeks in SA has been far from optimal, with rates consistently below 45% reported since 2002.<sup>j</sup> The National Department of Health (NDoH) has identified increasing early antenatal care as a key intervention in reducing MTCT and maternal deaths, as this leads to earlier initiation of the Basic Antenatal Care (BANC) package.<sup>k</sup> To this end, the PMTCT policy introduced in 2010 requires HIV-positive pregnant women to attend antenatal care as early as 14 weeks in order for appropriate interventions to be initiated.<sup>f</sup>

The indicator presented here measures the proportion of antenatal clients whose first visit was before 20 weeks out of all antenatal clients' first visits (those whose first visit was before and after 20 weeks). A national target of 50% for 2012/13 has been set in the Annual Performance Plan (APP) for 2012/13 – 2014/15.

- c National Department of Health. South Africa's National Strategic Plan on HIV, STIs and TB (2012 2016). Pretoria: National Department of Health, 2011.
- d National Department of Health. South Africa's National Strategic Plan for a Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA). Pretoria: National Department of Health, 2012.

e National Department of Health. National Action Framework for 'No Child Born with HIV by 2015 & Improving the Health and Wellbeing of Mothers, Partners and Babies in South Africa'. Pretoria: National Department of Health, 2012.

a Goga A, Dinh T, Jackson D. Evaluation of the Effectiveness of the National Prevention of Mother-to-Child Transmission (PMTCT) Programme Measured at Six Weeks Postpartum in South Africa, 2010. South African Medical Research Council, National Department of Health of South Africa and PEPFAR/ US Centers for Disease Control and Prevention, 2012.

b National Department of Health. Strategic Plan for Maternal, Newborn, Child and Women's Health (MNCWH) and Nutrition in South Africa 2012 - 2016. Pretoria: National Department of Health, 2011.

f Barron P, Pillay Y, Doherty T, Sherman G, Jackson D, Bhardwaj S, et al. Eliminating mother-to-child HIV transmission in South Africa. Bull World Health Organ. 2013;91(1):70-4. Epub 2013/02/12.

g Sprague C, Chersich M, Black V. Health system weaknesses constrain access to PMTCT and maternal HIV services in South Africa: a qualitative enquiry. AIDS Research and Therapy. 2011;8(1):10.

h Doherty T. HIV and AIDs Indicators. In: Massyn N, Day C, Barron PH, R., English R, Padarath A, editors. District Health Barometer 2011/12. Durban: Health Systems Trust; 2013. p. 120-40.

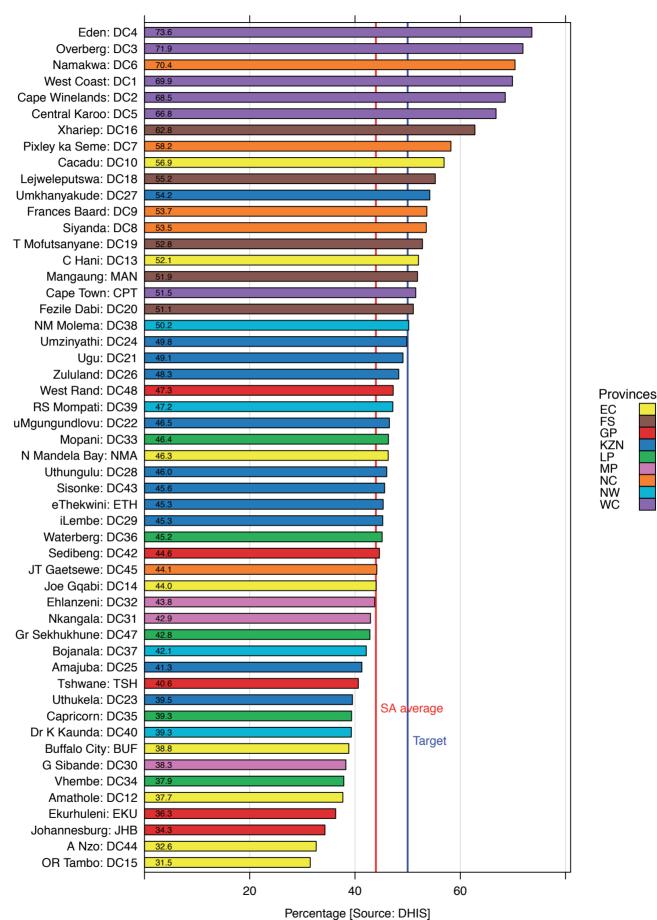
i Stinson K, Boulle A, Coetzee D, Abrams EJ, Myer L. Initiation of highly active antiretroviral therapy among pregnant women in Cape Town, South Africa. Tropical Medicine & International Health. 2010;15(7):825-32.

j DHIS data.

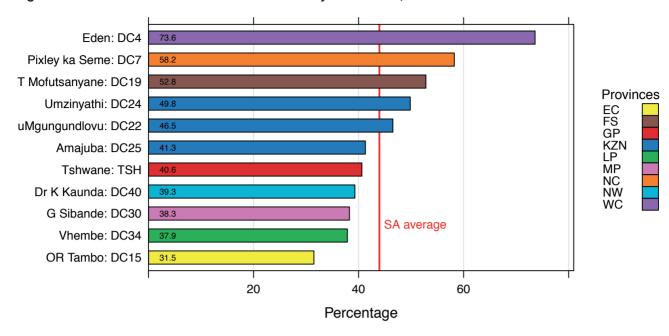
k National Department of Health. Annual Performance Plan 2012/13 - 2014/15. Pretoria: National Department of Health, 2012.

#### Section A: PMTCT Indicator Comparisons by District

As shown in Figure 1, approximately one third (17 out of 52) of all districts have rates below the national average of 44%, including all three districts in Mpumalanga. Only 19 out of 52 districts have reached the target rate of 50%; three of these are NHI districts: Eden (WC), Pixley ka Seme (NC) and Thabo Mofutsanyane (FS). Six out of 11 NHI pilot districts have rates below the national average of 44% (Figure 2). Of note is that two districts, Alfred Nzo (EC) and OR Tambo (EC), have rates just over 30%, meaning that only one in three pregnant women presents for a first visit before 20 weeks. This needs urgent review.

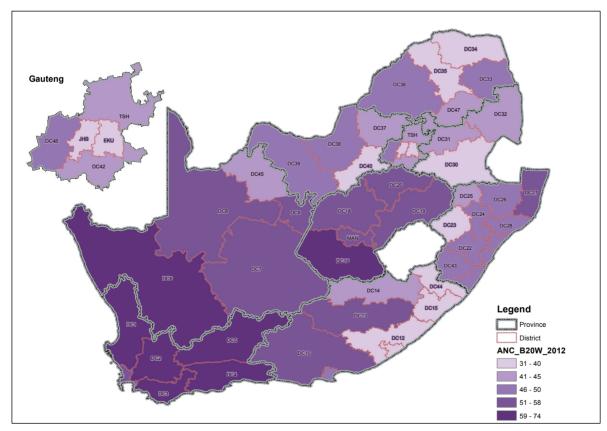


#### Figure 1: Antenatal visits before 20 weeks rate by district, 2012/13

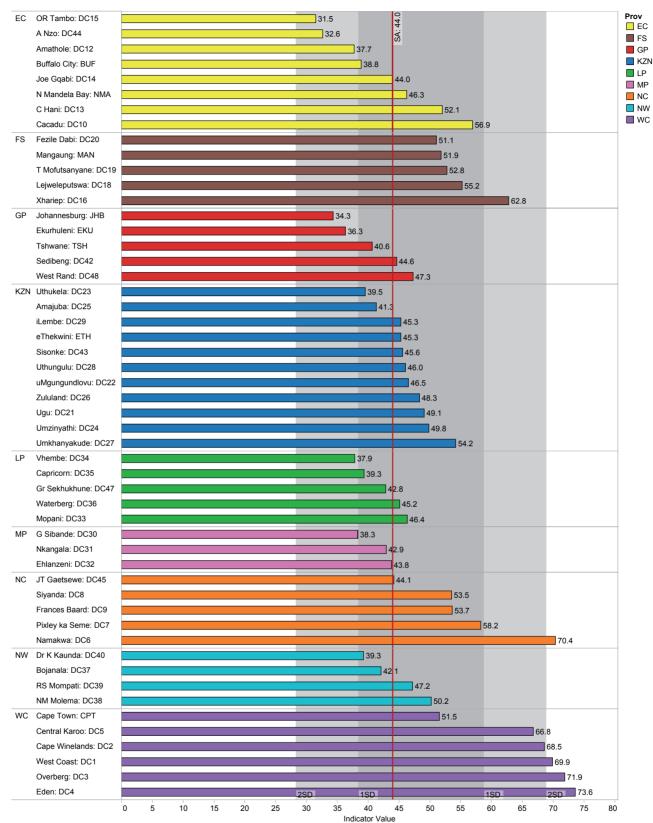


## Figure 2: Antenatal visits before 20 weeks rate by NHI district, 2012/13





# Figure 3: Antenatal visits before 20 weeks rate by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage

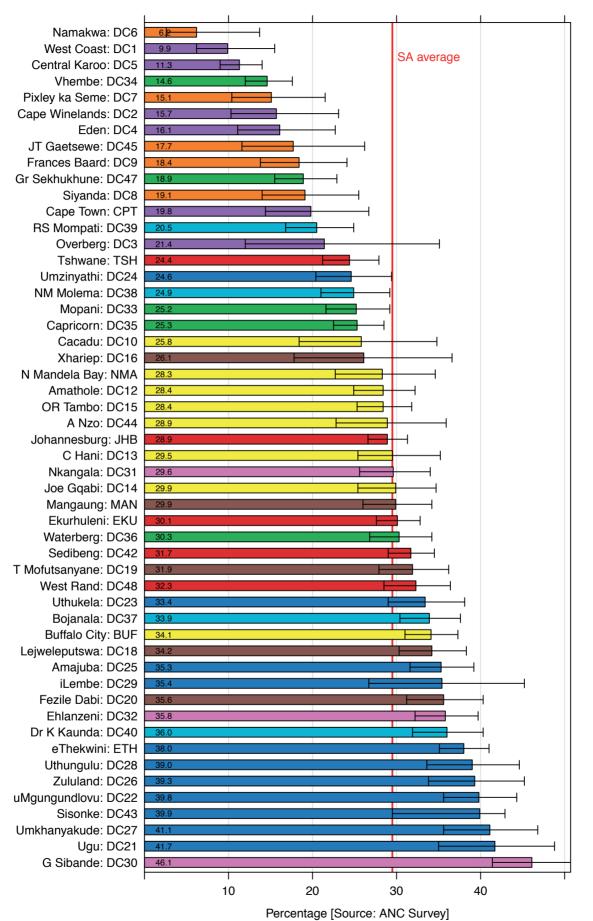
Source: DHIS

## 5.2 HIV prevalence among antenatal clients tested (survey)

The 2011 National Antenatal Sero-prevalence Survey and the DHIS data on antenatal clients who were known to be HIVpositive at their first antenatal visit are used to report HIV prevalence among antenatal clients. The national average for facility antenatal HIV prevalence from the DHIS in 2012/13 was 27.3%, which is slightly lower than the 2011 Antenatal Survey (29.5%). The National Antenatal Sero-prevalence Survey shows that the prevalence has stabilised at around 29% since 2007.<sup>1</sup> The reported Antenatal Survey prevalence is higher than the DHIS prevalence in many districts, particularly in the Western Cape, Northern Cape, Free State and Eastern Cape. Three districts report an antenatal prevalence that is markedly higher in the Survey than in the DHIS, namely Dr K Kaunda (NW), Eden (WC) and Overberg (WC) (Figures 4, 7 and 10).

Among the 11 NHI pilot districts, four districts reported antenatal HIV prevalence above the SA national average (both National Antenatal Sero-prevalence Survey and the DHIS data); these were: Thabo Mofutsanyane (FS), Amajuba (KZN), uMgungundlovu (KZN) and Gert Sibande (MP) (Figures 5 and 8).

I National Department of Health. The 2011 National Antenatal Sentinel HIV and Syphilis Prevalence Survey in South Africa. Pretoria: National Department of Health, 2011.



#### Figure 4: HIV prevalence among antenatal clients (survey) by district, 2011



Provinces

EC FS GP

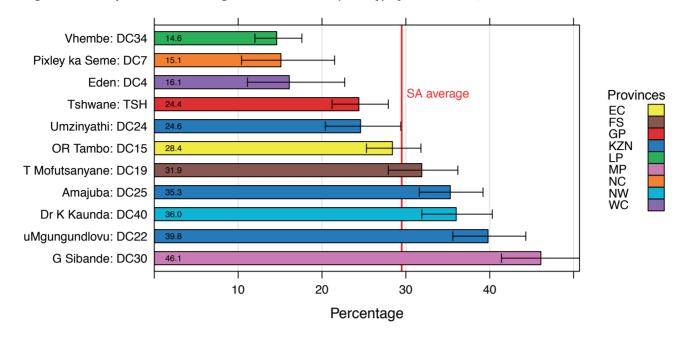
KZN LP

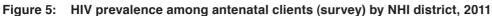
MP

NC

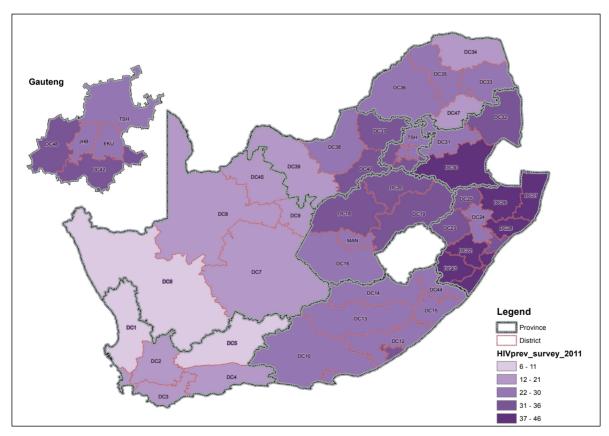
NW

WC

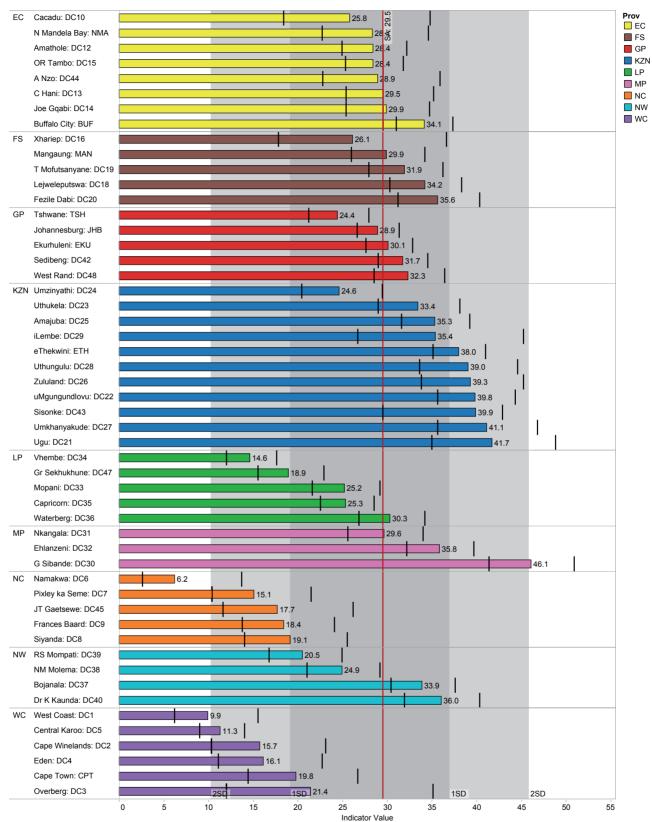




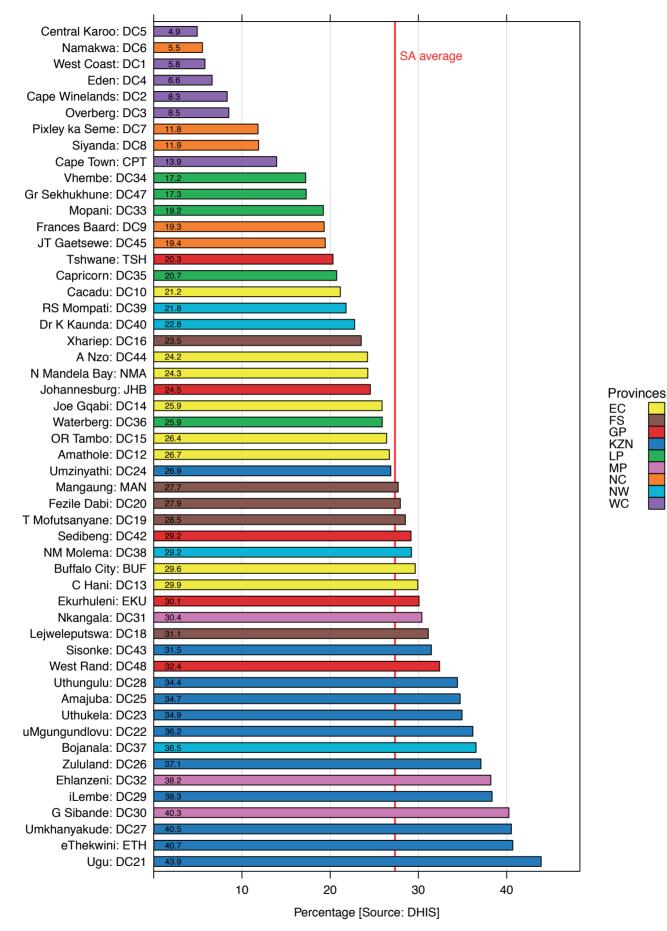
Map 2: HIV prevalence among antenatal clients (survey) by district, 2011



# Figure 6: HIV prevalence among antenatal clients (survey) by district, grouped by province, showing standard deviations from the average, 2011



Units: Percentage Source: ANC Survey



EC FS GP

KZN

LP MP

NC

NW

WC

### Figure 7: Antenatal client HIV prevalence in facility by district, 2012/13

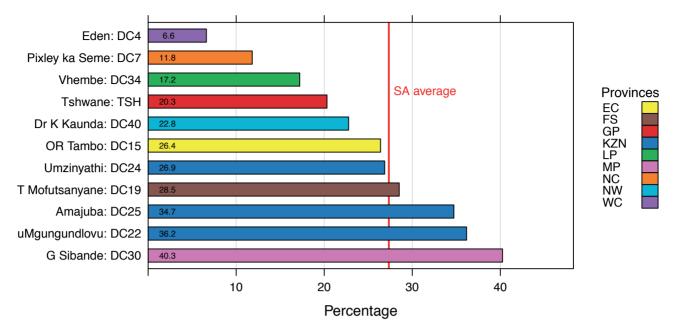
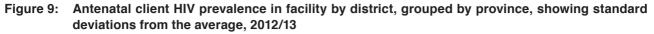
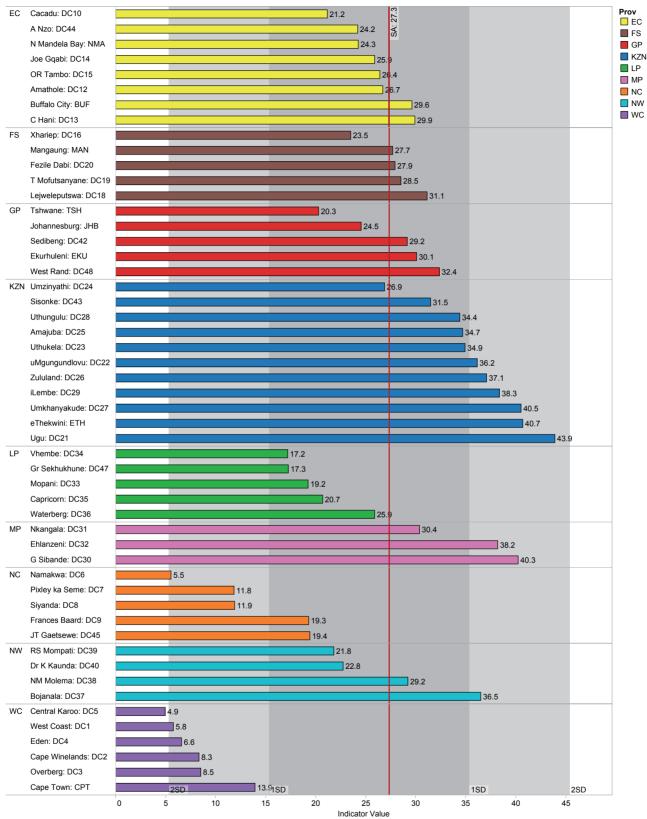


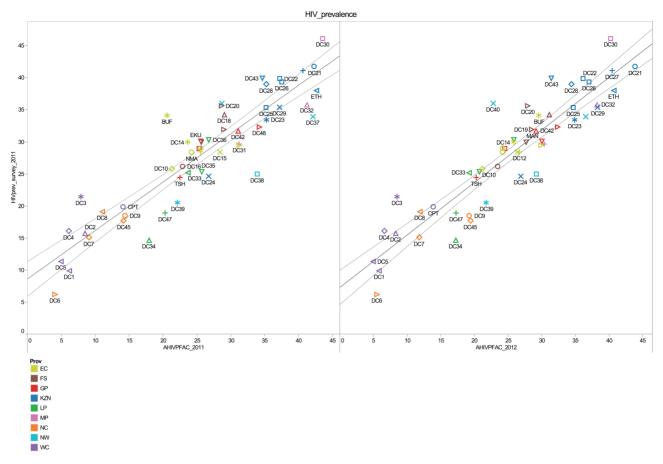
Figure 8: Antenatal client HIV prevalence in facility by NHI district, 2012/13





Units: Percentage Source: DHIS





### 5.3 Antenatal client initiated on ART rate

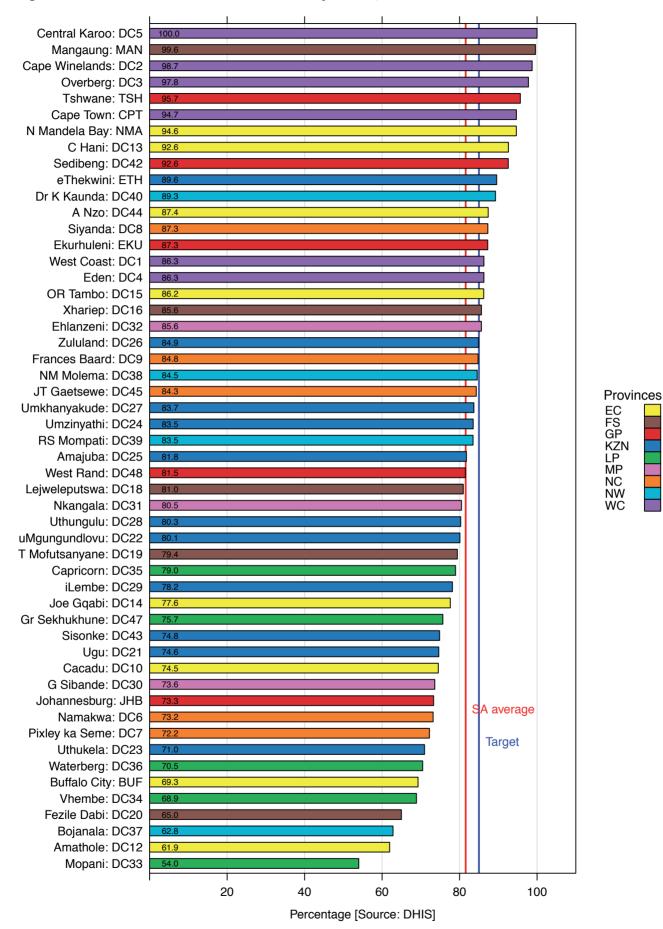
This indicator measures the proportion of antenatal clients initiated on ART out of all antenatal clients eligible for ART (i.e. with a CD4 count lower than 350/µl and/or a WHO staging of 4). The denominator (eligibility for ART) for this indicator is problematic due to unreliable DHIS data on CD4 counts, and as such may result in overestimation.<sup>h,m</sup> For 2012/13, the national rate was 81.6%. As shown in Figure 11, ART initiation rates range from 54% in Mopani (LP) to 100% in Central Karoo (WC), which has reported 100% rates since 2010/11.<sup>n</sup> Only 19 districts have reached the target of 85% set by the NDoH; four of these are NHI districts (Figure 12). All districts in Western Cape Province have already reached the set NDoH target. Two districts have shown striking decreases in rates over the last three years, notably Mopani (LP)<sup>o</sup> and Amathole (EC)<sup>p</sup> and require further review (Figure 14). Data quality issues with this indicator appear to have improved as evidenced by the fact that no districts reported rates over 100%. However, a number of districts have reported vastly different rates over the last three years, and this may indicate ongoing data recording and reporting issues.

m National Department of Health. Health Data Advisory and Co-ordination Committee Report. Pretoria: National Department of Health, 2012.

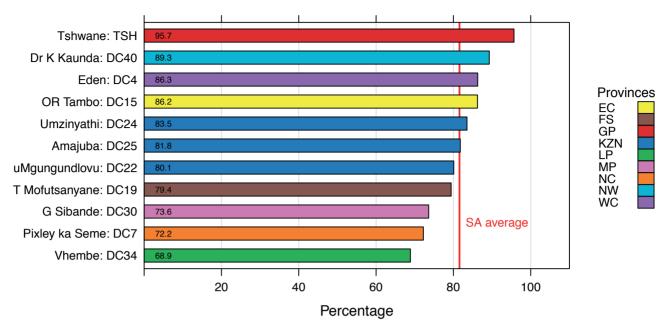
n DHIS data

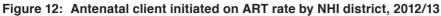
o In Mopani there has been a decline in the number of facilities reporting initiation of antenatal clients. There are also fewer large values reported by individual facilities in 2012/13 than in previous years, so the decline may represent an improvement in data quality and a more realistic value, or possibly a decline in service provision.

p It appears that the denominators for this indicator are too low for several months in 2010/11, thus the decline is probably simply due to improved data collection of the denominator, bringing the indicator value to more realistic levels.



#### Figure 11: Antenatal client initiated on ART rate by district, 2012/13





### Map 3: Antenatal client initiated on ART rate by district, 2012/13

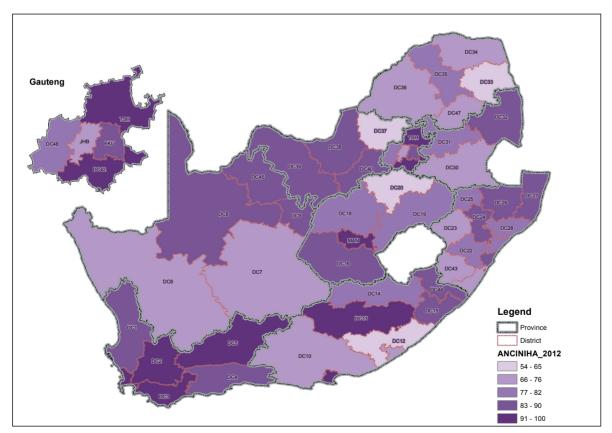
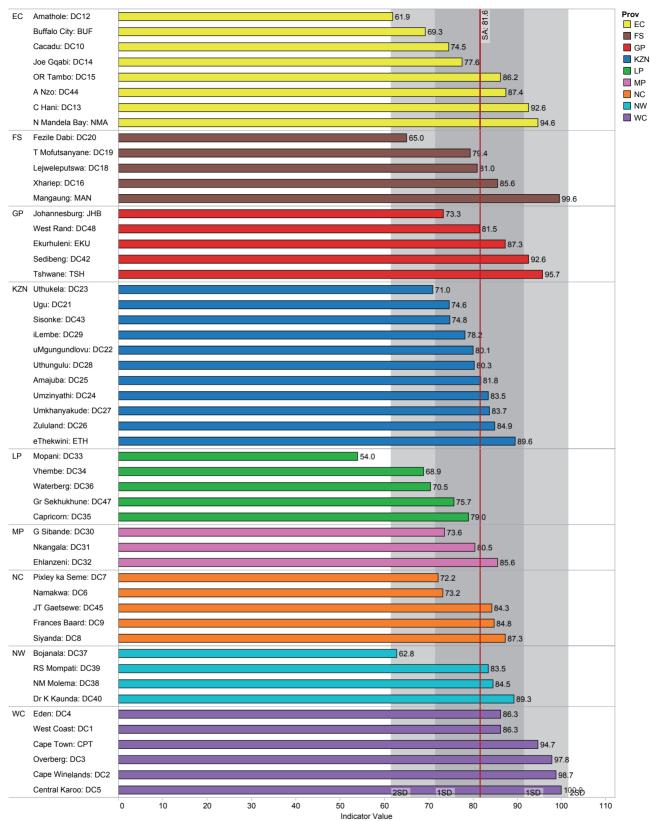


Figure 13: Antenatal client initiated on ART rate by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: DHIS

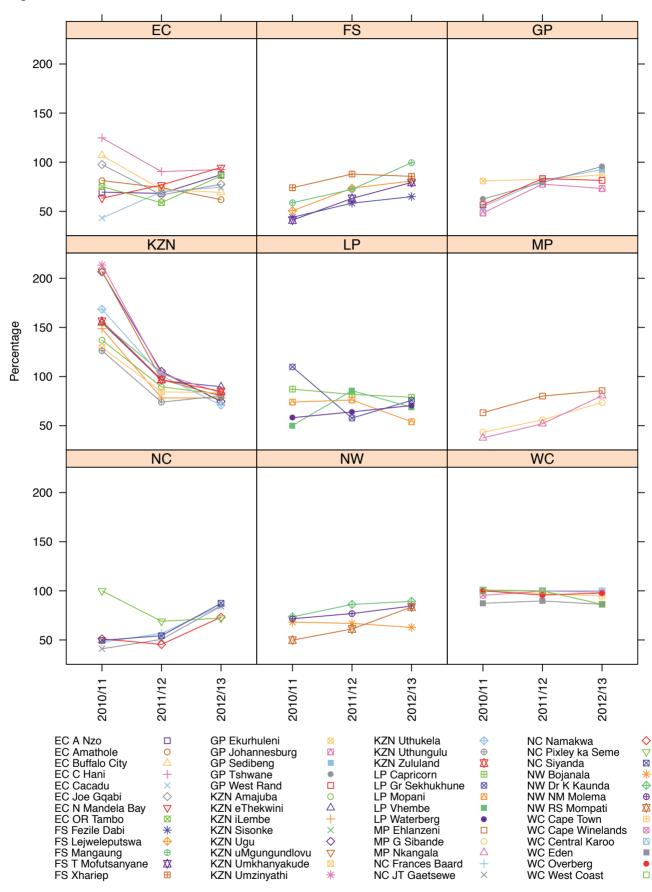


Figure 14: Annual trends: antenatal clients initiated on ART rate

## 5.4 Early infant HIV diagnosis coverage

Coverage of early infant diagnosis (EID) measures the proportion of HIV-exposed infants who receive an early HIV test. This indicator is calculated by dividing the number of PCR tests performed in infants under 2 months of age (numerator) by the number of HIV-exposed infants (denominator). Different data sources can be used to calculate EID coverage. Numerator data can be obtained from the DHIS ('Baby PCR tests around 6 weeks' indicator) or from the NHLS (PCR tests in infants <2 months of age). The denominator, HIV-exposed infants who require a PCR test, can be obtained from the DHIS ('Live births to HIV-positive women' indicator) or can be calculated by multiplying Stats SA registered live births by antenatal HIV prevalence from the national ANC survey. Using DHIS indicators gives a higher coverage than using NHLS PCR data with calculated exposed births (Figure 15). DHIS data may overestimate coverage, as the denominator ('Live births to HIV-positive women') is known to be under-reported and the number of PCR tests used in the numerator may be higher than expected, as PCR tests performed in older children may also be included. In comparison, NHLS PCR data only include tests performed in infants under 2 months of age and thus give a more accurate estimate of the numerator. However, the denominator used by the NHLS is also an estimate, as it is not known how many births take place in the private sector.

The national EID coverage during 2012/13, using NHLS PCR data with calculated HIV-exposed births, was 73.9%, ranging from 61.1% in NW to 86.7% in GP (Figure 16). GP has had the highest EID coverage of all provinces for the past three years. KZN had the second highest EID coverage in 2012/13 (78.6%). In the most recent national survey, KZN had the highest antenatal HIV prevalence of all provinces in the country (37.4%) and it is therefore encouraging that there is a high coverage of EID in this province.

At a district level, EID coverage ranged from 33.2% in Alfred Nzo (EC) to 98.7% in Johannesburg (GP) (Figure 17). Coverage was above 100% in four districts and above 200% in one district (Central Karoo, WC). This represents data errors, with either underestimation of HIV-exposed infants or over-reporting of PCR testing; the latter may be due to incorrect mapping of healthcare facilities, resulting in PCR tests being attributed to the wrong district. EID coverage ranged widely within individual provinces, with coverage in EC ranging from 33.2% in Alfred Nzo District to 86.2% in Joe Gqabi District, and in NC, from 42.4% in Siyanda District to 89.5% in Frances Baard District. Three of NW's districts demonstrated EID coverage of  $\leq$ 60%, indicating the need for increased testing of HIV-exposed infants in this province, and coverage was over 100% in the remaining districts. All districts in the WC demonstrated EID coverage above 60%, but the province that performed with the highest consistency was MP with coverage in all districts of 70% or above. This is a marked improvement from 2011/12, when coverage in all three MP districts was below 60%. EID coverage was above 70% in five of the NHI districts, namely Tshwane (GP), Umzinyathi (KZN), uMgungundlovu (KZN), Vhembe (LP) and Gert Sibande(MP).

Although EID coverage is improving, additional efforts are needed to reach the national PMTCT Framework target of 100% of HIV-exposed infants in all districts. PCR testing of all HIV-exposed infants is essential if all HIV-infected infants are to be identified for early treatment to reduce infant morbidity and mortality.

Figure 15: Comparison of baby PCR around 6 weeks	; uptake rate (DHIS) an	d early infant HIV diagnosis
coverage (NHIS), 2010/11-2012/13		

	District	FY 2011	FY 2012	FY 2013	
С	A Nzo: DC44	□ 17.4 O 89.9	<b>28.6 0</b> 102.8	33.2 0 104.2	
	Amathole: DC12	<b>49.0 117.0</b>	<b>82.3 132.5</b>	<b>79.2 121.2</b>	
	Buffalo City: BUF	10 56.9	□ ○ 71.3	0 70.7	
	C Hani: DC13	□ 51.2○ 84.5	88.0	O 87.3	
	Cacadu: DC10	95.1	□ ○ 88.8	92.3	
	Joe Gqabi: DC14	88.8	97.8	0 101.2	
	N Mandela Bay: NMA	<b>O</b> 60.1	<b>□○</b> 69.0	O 85.3	
	OR Tambo: DC15	<b>48.4</b>	10 62.4	1 65.9	
-S	Fezile Dabi: DC20	□ 56.9○ 88.9	G4.2 <b>O</b> 97.6	95.1	
	Lejweleputswa: DC18	<b>59.8 0</b> 103.3	73.30 105.4	<b>95.1</b>	
	Mangaung: MAN	34.6 0 80.2	<b>51.0 89.7</b>	□ 52.6 <b>○</b> 88.5	
	T Mofutsanyane: DC19	<b>52.2 105.3</b>	<b>63.4 0</b> 108.8	□ 69.3 <b>○</b> 113.6	
	Xhariep: DC16	□ 150.4 O 234.5	□ 136.7 238.9 ○	□ 148.5 <b>○</b> 233	
GP	Ekurhuleni: EKU	□ 60.9 <b>○</b> 91.9	Q 87.4	92.2	
-	Johannesburg: JHB	□ <b>○</b> 117.8	0 105.9	0 110.2	
	Sedibeng: DC42	40.0 0 81.9	52.2 0 88.7	□ 56.0 <b>○</b> 95.3	
	Tshwane: TSH		<b>0</b> 90.7	<b>Q</b> 91.6	
	West Rand: DC48	0 75.3	<b>DO</b> 81.3	<b>0</b> 85.0	
KZN	Amajuba: DC25	56.4 999.4	□ 69.1 ○ 131.7		
	eThekwini: ETH	49.4 90.4	<b>66.197.3</b>		
	iLembe: DC29	0 125.5	O □ 141.8	O □ 156.1	
	Sisonke: DC43	35.7 95.0	□ 39.6 O 113.9	43.6 0 128.8	
	Ugu: DC21	□ 57.4 <b>○</b> 99.5	□ 74.2 <b>○</b> 113.4	■ 43.0 ■ 128.8	
	uMgungundlovu: DC22			0 106.6	
	Umkhanyakude: DC27 Umzinyathi: DC24				
	•	<b>50.5 104.8</b>		□ 86.1 ○ 131.5	
	Uthukela: DC23	□ 41.3 O 125.7	□ 61.6 O 136.4	82.2 0 135.1	
	Uthungulu: DC28	0 75.6	0 🖸 99.2	0 🗖 111.9	
_	Zululand: DC26	0 83.0	79.40 110.8	80.1 0 117.8	
_P	Capricorn: DC35	41.3 0 78.7	45.8 • 93.7	<b>52.8 99.4</b>	
	Gr Sekhukhune: DC47	58.4	0 89.6	102.3	
	Mopani: DC33	44.1 0 85.7	44.0 0 83.3	<b>□</b> 58.6 <b>○</b> 91.5	
	Vhembe: DC34	<b>O</b> 59.8	<b>C</b> 64.9	O□ 75.1	
	Waterberg: DC36	□ 51.6 <b>○</b> 90.4	□ 53.0 <b>○</b> 91.8	<b>□</b> 59.1 <b>○</b> 98.5	
MP	Ehlanzeni: DC32	73.9	• • 84.2	0 102.7	
	G Sibande: DC30	O □ 51.5	<b>53.6 93.7</b>	□ <b>○</b> 98.3	
	Nkangala: DC31	□ ○ 73.5	□ 53.3 ○ 94.6	□ 69.5 ○ 105.8	
NC	Frances Baard: DC9	01 92.1	<b>10</b> 90.8	O 109.8	
	JT Gaetsewe: DC45	□ 31.7 <b>○</b> 81.6	□ 57.2 ○ 95.0	□ ○ 85.5	
	Namakwa: DC6	<b>29.3 O</b> 77.6	98.6	O 83.6	
	Pixley ka Seme: DC7	39.9 O 76.7	<b>67.4 119.2</b>	□ 60.9 ○ 99.5	
	Siyanda: DC8	□ ○ 55.5	□ 33.2 <b>○</b> 96.2	42.4 74.3	
NW	Bojanala: DC37	□ 41.2 O 99.3	□ 43.4 ○ 103.8	<b>48.7 O</b> 110.4	
	Dr K Kaunda: DC40	<b>49.0</b> 79.1	<b>62.0 105.5</b>	□ 60.3○ 92.7	
	NM Molema: DC38	<b>0</b> 97.7	O □ 126.2	○ 97.6 □ 135.0	
	RS Mompati: DC39	□ 37.0 O 125.2	<b>49.1 111.2</b>	<b>53.6 106.7</b>	
WC	Cape Town: CPT	O 91.0	○ 35.2 □ 68.5	O □ 73.8	
	Cape Winelands: DC2	91.8	○ 39.2 □ 75.6	○ □ 77.6	
	Central Karoo: DC5	O 63.2 □ 196.8	○ 36.6 □ 212.5	○ 57.6 250.8 □	
	Eden: DC4	□ 60.3 ○ 103.0	O 🔲 71.5	01 64.8	
	Overberg: DC3	94.10 127.4	○ 49.0 □ 83.9	○□ 77.9	
	West Coast: DC1	□ 71.9 ○ 125.1	Q 45.4 □ 89.8	O 🗖 86.9	

Baby PCR 6w uptake (blue) is the NIDS indicator and is defined as 'Baby PCR test around 6 weeks' divided by 'Live birth to HIV positive woman' as collected by DHIS.

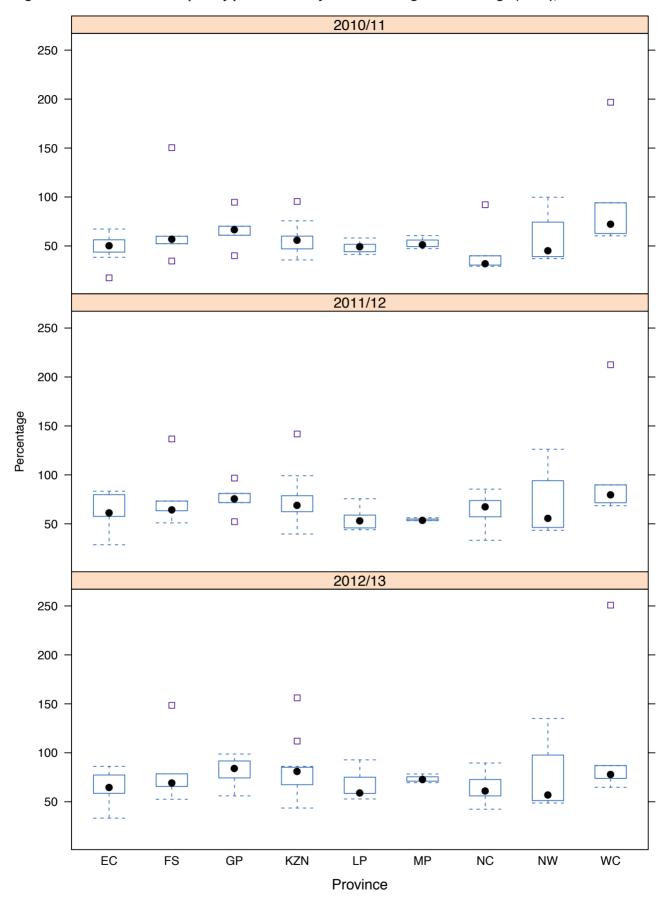
EID coverage (orange) uses the number of PCR tests done in infants under 2 months as recorded by NHLS as the numerator. The denominator uses StatsSA live births x HIV prevalence from the ANC survey to calculate the estimated number of HIV-exposed infants for the denominator.

Indic O Baby PCR test around 6 weeks uptake rate

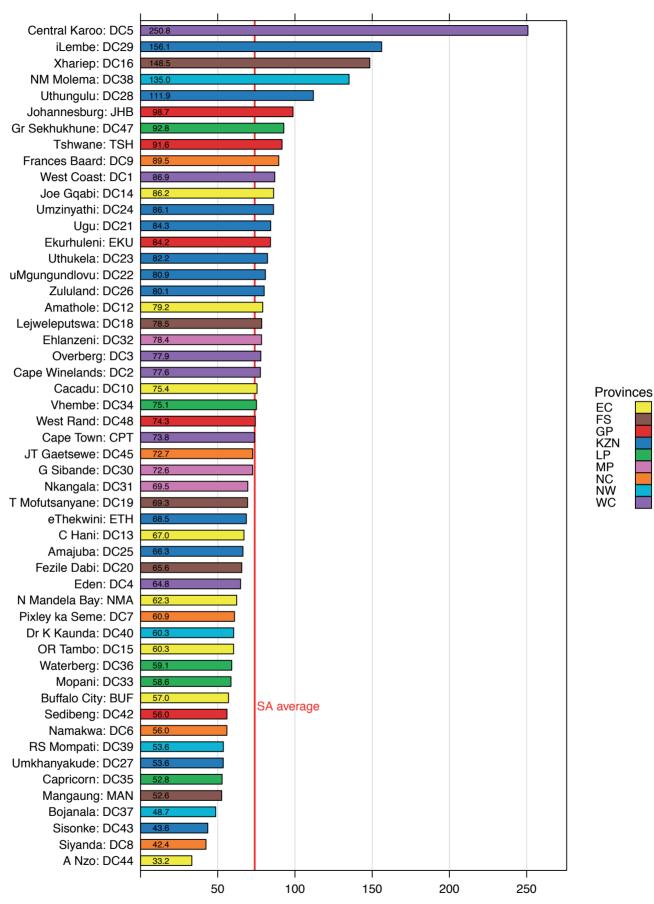
Early infant HIV diagnosis coverage

Indic Baby PCR test around 6 weeks uptake rate Early infant HIV diagnosis coverage

105

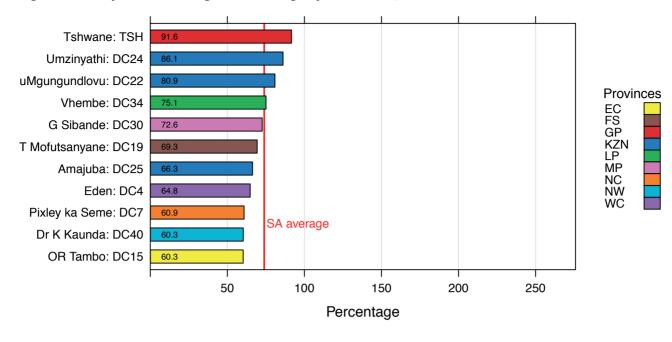






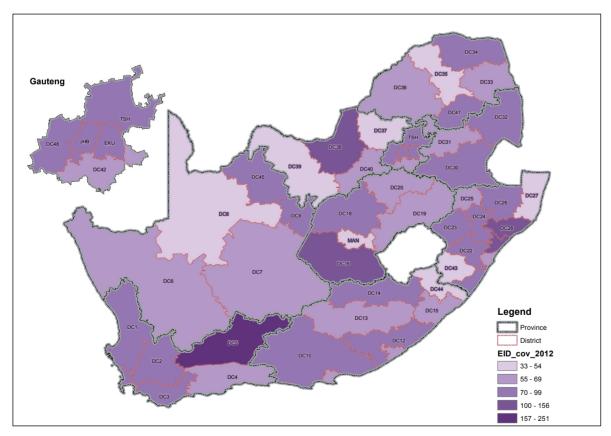
#### Figure 17: Early infant HIV diagnosis coverage by district, 2012/13



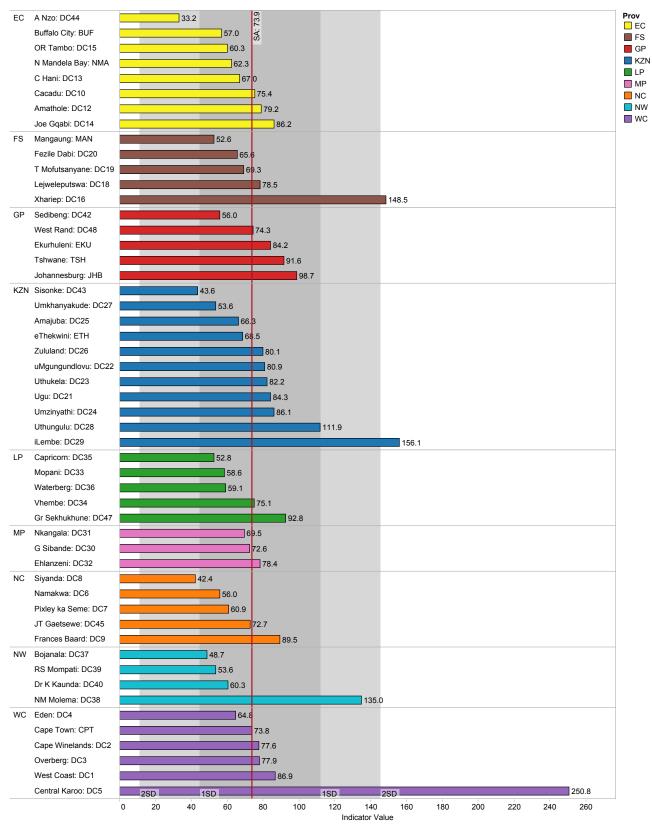


#### Figure 18: Early infant HIV diagnosis coverage by NHI district, 2012/13





# Figure 19: Early infant HIV diagnosis coverage by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage

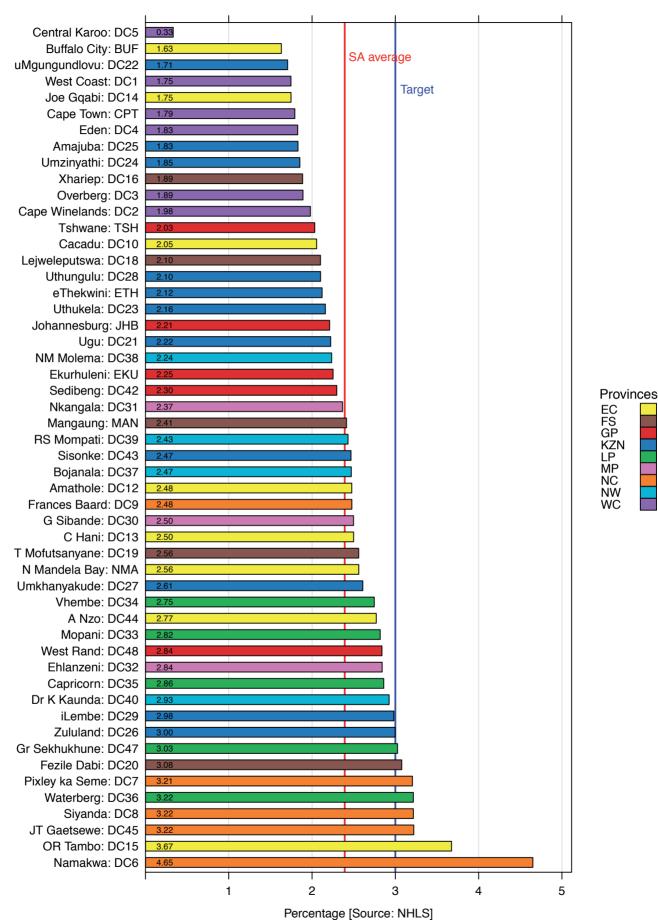
Source: NHLS, ANC Survey, Stats SA live births

# 5.5 Proportion of PCR tests HIV-positive for infants under two months of age / Infant 1st PCR test positive around 6 weeks rate (DHIS)

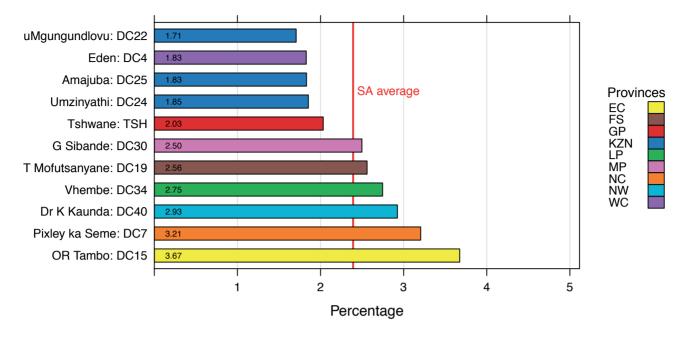
This indicator measures the proportion of early infant PCR tests that have a positive result. It approximates the early vertical (in utero and intrapartum) transmission rate for those infants who access an early PCR test. Like EID coverage, this indicator can be calculated using DHIS or NHLS data. According to the DHIS, 2.5% of infants in South Africa who had a PCR test around 6 weeks of age tested PCR-positive during 2012/13. NHLS data present an equivalent 2012/13 rate of early vertical transmission in South Africa, with 2.4% of infants under 2 months of age who accessed PCR testing having a positive test result.

At a district level using NHLS data, the percentage of PCR tests under 2 months of age that were positive during 2012/13 ranged from 0.3% in Central Karoo (WC) to 4.7% in Namakwa (NC) (Figure 20). In some provinces, percentage positivity varied widely between districts, with rates in EC ranging from 1.6% in Buffalo City to 3.7% in OR Tambo. Under 2-month percentage positivity was higher than the target of 3.0% in only eight districts, four of which were in NC. However, given the relatively small number of PCR tests in infants under 2 months of age in NC compared to other provinces, percentage positivity is likely to be higher in this Province, even with few HIV-infected infants. The small number of PCR tests probably explains the high transmission rate in Namakwa, the only district where percentage positivity was above 4%. The best-performing province was WC, with under 2-month percentage positivity below 2.0% in all six districts. All districts in GP, KZN, MP and NW achieved early vertical transmission rates below the target of 3.0%. Two NHI districts had rates above 3.0% (Figure 21).

The trend towards decreasing early vertical transmission rates in South Africa is encouraging, as shown in Figure 23. From 2007/08, all provinces achieved a fairly consistent decline in the percentage of positive PCR tests under 2 months, indicating widespread, successful implementation of the PMTCT programme. According to the NSP target, PMTCT programmes should reduce vertical transmission to less than 2% at 6 weeks of age by 2016. With the trend to reduced positivity rates in all provinces, South Africa is on track to achieve this target. However, only WC has achieved this target to date, and continued efforts to reduce early vertical transmission are required. Efforts should also be focused on minimising postnatal transmission due to breastfeeding.

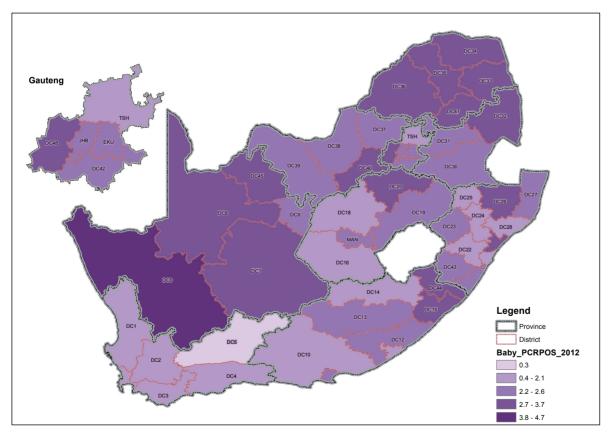


#### Figure 20: Percentage PCR tests under 2 months positive by district (NHLS data), 2012/13

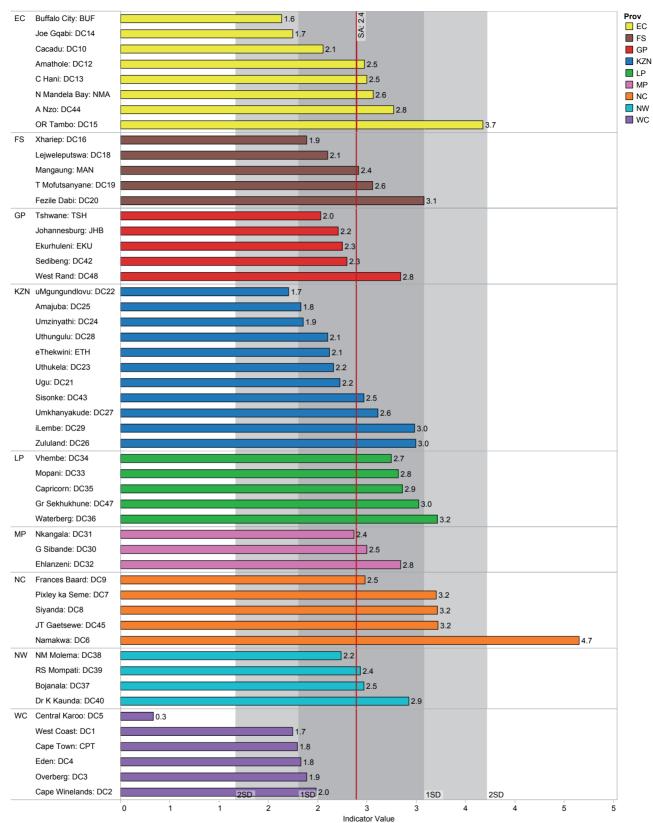


# Figure 21: Percentage PCR tests under 2 months positive by NHI district (NHLS data), 2012/13



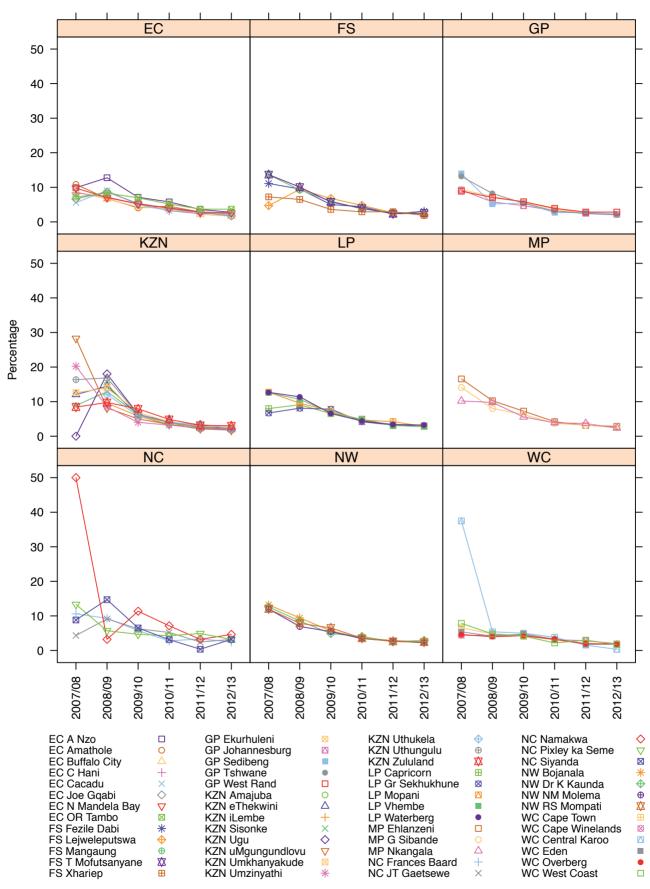


# Figure 22: Percentage PCR tests under 2 months positive by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: NHLS





# 6 Immunisation

### Annette Gerritsen

Immunisation is one of the most effective healthcare interventions to prevent serious illnesses and death in young children. Immunisation has a significant impact on morbidity and mortality rates and has a critical role to play in efforts to achieve the Millennium Development Goal 4 to reduce child mortality rates by two thirds by 2015, compared to the 1990 baseline. The immunisation coverage under 1 year indicator is used to measure the effectiveness of the immunisation programme and is also a proxy indicator for the functioning of the health system.

# 6.1 Immunisation coverage under 1 year

Immunisation coverage under 1 year measures the percentage of children under one year of age who have received the following immunisations:<sup>a</sup>

- At birth: OPV (0), BCG
- 6 weeks: OPV (1), DTaP-IPV-Hib (1), Hep B (1)
- 10 weeks: OPV (2), DTaP-IPV-Hib (2), Hep B (2)
- 14 weeks: OPV (3), DTaP-IPV-Hib (3), Hep B (3)
- 9 months: Measles (1)

Data from the District Health Information System (DHIS) were used to calculate the immunisation coverage under 1 year indicator by dividing the total number of children under one year that received all the aforementioned immunisations by the total population of children under one year old. At present, the numerator does not include the rotavirus or pneumococcal conjugate vaccines that were introduced in 2009. Furthermore, this indicator is very sensitive to denominators (population estimates) or numerators that might be incorrect. Rates over 100% may be due to data quality problems such as overcounting of children immunised, inclusion of campaign data, underestimation of the population denominator, or the immunisation of children from other areas (e.g. migrants from outside the country, or children who have moved from one province or district to another).

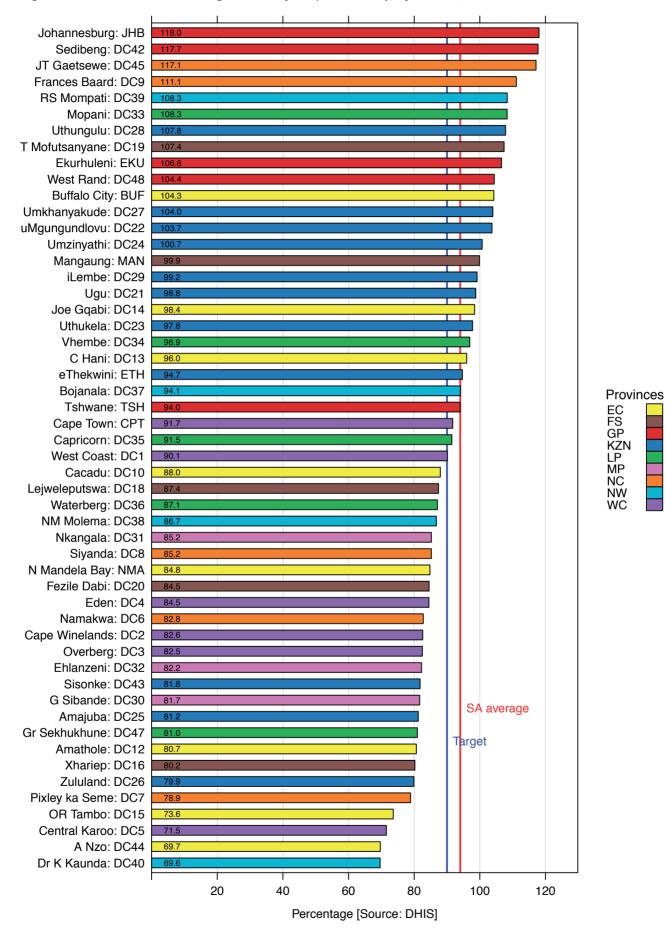
The immunisation coverage in the country for 2012/13 was 94.0% which is fairly similar to the 2011/12 level of 95.2% based on the DHIS population time series. The coverage differs between the provinces, ranging from 82.6% in Eastern Cape and 83.0% in Mpumalanga to 107.9% in Gauteng in 2012/13.

The wide variation in immunisation coverage among districts in 2012/13 (Figure 1), which reflects a variation from 118.0% in the City of Johannesburg and 117.7% in Sedibeng (both GP) to 69.7% in Alfred Nzo (EC) and 69.6% in Dr Kenneth Kaunda (NW), the latter being one of the 11 NHI pilot sites (Figure 2). Although half of the districts show a higher coverage in 2012/13 compared to 2011/12, two districts showed large drops in immunisation rates. They are OR Tambo (EC), which decreased by 16.7 percentage points, and Tshwane (GP) which decreased by 15.8 percentage points. They are both NHI pilot districts. On the other hand, uMgungundlovu (KZN), Nkangala (MP) and JT Gaetsewe (NC) showed large increases in coverage, with 15.5, 16.2 and 22.4 percentage points respectively.

In addition, for 2011/12 the indicator "immunisation coverage under 1 year – adjusted" was calculated using the total number of children under one year according to the Census 2011 as the denominator. Although many concerns have been raised about the quality of the Census 2011 results and whether the huge increase in the count of children under one year is not an over-correction after the undercounts of the previous two censuses, the new figures do indeed imply more realistic immunisation coverage levels that are more comparable to survey results. This is particularly relevant for some districts that have been recording coverage well over 100%, because the existing population time series probably underestimates the influx of immigrants and the pace of urbanisation.

When population data from the Census 2011 are used, the coverage in 2011/12 at 80.1% was much lower than the DHIS data value of 95.2%. The national coverage (using DHIS population denominator) exceeded the target of 90% in 2011/12 and 2012/13. However, when using Census 2011 denominator data, the average coverage in the country is below the target and only a minority of districts (17.3%) had a coverage above the target in 2011/12. The district coverage according to the Census 2011 denominator data ranges from 103.6% in eThekwini (KZN) to 55.1% in Nkangala (MP) in 2011/12. For 2011/12, coverage showed a large difference when using DHIS denominator data compared to Census 2011 denominator data, especially for Gauteng (114.6% versus 88.6%) and Limpopo (96.7% versus 72.1%). Figure 4 illustrates the impact of the population denominator on coverage estimates for 2011/12.

a OPV is Oral Polio Vaccine, BCG is Bacille Calmette-Guérin, DTaP-IPV-Hib is Diphteria, Tetanus, acellular Pertussis, Inactivated Polio vaccine and *Haemophilus influenzae* type b combined, Hep B is Hepatitis B vaccine. Over the past years OPV2 and OPV3 have been phased out with the introduction of the pentavalent DTaP-IPV-Hib vaccine. From April 2013, the new NIDS specifies that: The child should only be counted ONCE as fully immunised when receiving the last vaccine in the course (usually the 1st measles and PCV3 vaccines) AND if there is documented proof of all required vaccines (BCG, OPV1, DTaP-IPV/Hib 1, 2, 3, HepB 1, 2, 3, PCV 1,2,3, RV 1,2 and measles 1) on the Road to Health Card/Booklet AND the child is under 1 year old.



#### Figure 1: Immunisation coverage under 1 year (annualised), by district, 2012/13

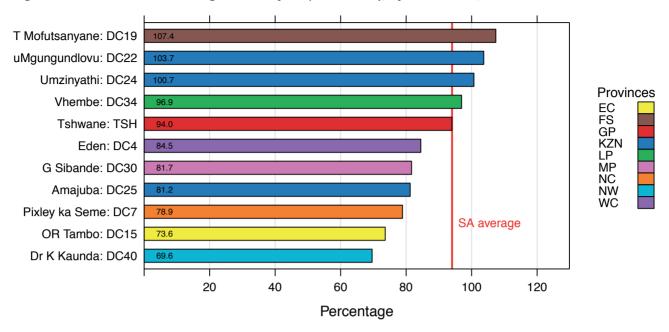
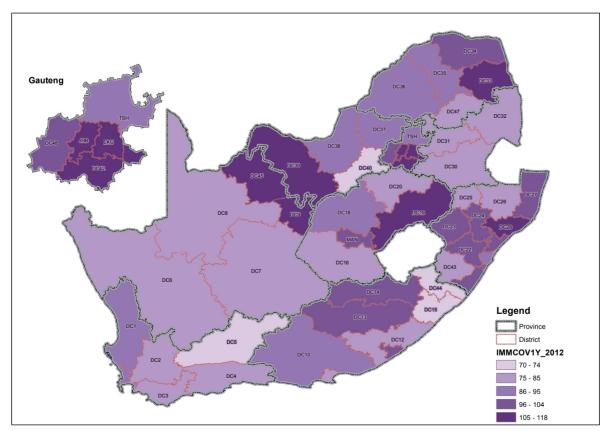
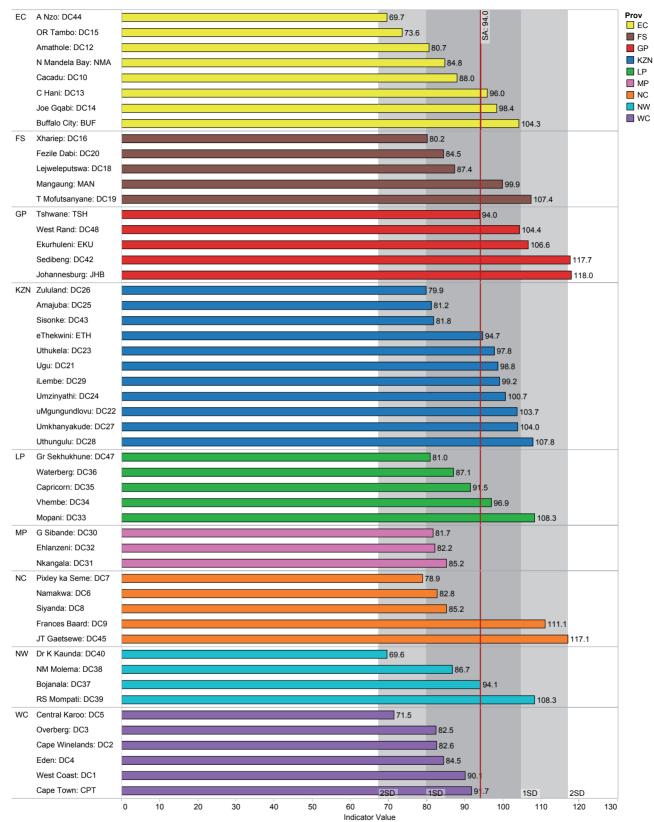


Figure 2: Immunisation coverage under 1 year (annualised), by NHI district, 2012/13

### Map 1: Immunisation coverage under 1 year (annualised), by district, 2012/13







Units: Percentage Source: DHIS

#### Figure 4: Immunisation coverage under 1 year (annualised) comparing DHIS and Census 2011 population estimates, by district, 2011/12

Prov EC	District A Nzo: DC44	155.7 SA avg (Census): 80.	1			
EU	A NZO: DC44 Amathole: DC12	W 55.7 07 avg (Ochous). 00.		00.0		
				88.8	0	
	Buffalo City: BUF		79.7		<b>O</b> 99.7	
	C Hani: DC13	_		90.0	0 104.0	
	Cacadu: DC10	73.9	0 85.0			
	Joe Gqabi: DC14	_	81.5		0 101.4	
	N Mandela Bay: NMA		78.6			
	OR Tambo: DC15			0 90.3		
FS	Fezile Dabi: DC20			88.2		
	Lejweleputswa: DC18		<b>CO</b> 86			
	Mangaung: MAN		77.7	0 91.4		
	T Mofutsanyane: DC19				99.0	
	Xhariep: DC16			89.7		
GP	Ekurhuleni: EKU		82.6		0 107.6	
	Johannesburg: JHB		8	7.0		125.0 🔿
	Sedibeng: DC42				100.4	0 120.8
	Tshwane: TSH			92.	-	
	West Rand: DC48				97.0 🔾 103.3	
KZN	Amajuba: DC25	68.7 🔾	7 <mark>7</mark> .7			
	eThekwini: ETH				107.3	
	iLembe: DC29		'6. <mark>8</mark>		<b>O</b> 98.0	
	Sisonke: DC43		0 🛛 85.8	3		
	Ugu: DC21		82.5		95.9	
	uMgungundlovu: DC22	73.8	0	88.2		
	Umkhanyakude: DC27		85.0		0 102.5	
	Umzinyathi: DC24			9	2.9 🔿 104.1	
	Uthukela: DC23			92	.6 🔿 105.4	
	Uthungulu: DC28				🗖 100.3 🛛 0 109.8	
	Zululand: DC26	<b>1</b> 75	.9 80.6			
LP	Capricorn: DC35	74.5			<b>O</b> 98.0	
	Gr Sekhukhune: DC47	58.9	0 85.6	5		
	Mopani: DC33	<b>7</b> 5.	1		0 106.1	
	Vhembe: DC34		83.6		0 100.4	
	Waterberg: DC36	61.3	0 86	6.9		
MP	Ehlanzeni: DC32	61.5 🔿 71.9				
	G Sibande: DC30	67.1	0 83.3			
	Nkangala: DC31	55.1 069.0				
NC	Frances Baard: DC9			88.5	0 109.8	
	JT Gaetsewe: DC45	C	78.3	c	94.7	
	Namakwa: DC6		80.9 🗖 86.0	D		
	Pixley ka Seme: DC7					
	Siyanda: DC8		83.9	90.1		
NW	Bojanala: DC37	60.9	08			
	Dr K Kaunda: DC40	63.1 0 71.0				
	NM Molema: DC38		7.7			
	RS Mompati: DC39	73.3			0 98.9	
WC	Cape Town: CPT	10.0	80.7	0 9:	-	
	Cape Winelands: DC2		78.9 084.9			
	Central Karoo: DC5	66.2 073.6		1		
	Eden: DC4		1 83.6			
		<b>— •</b> •	_	*		
	Overberg: DC3 West Coast: DC1	□ ○ 75. □ 67.5	'l _	o.Barget	SA avg (DHIS): 95.2	

Imm cov yy (blue) is the DHIS indicator.

Imm cov yy Census (orange) uses the number of children fully immunised under 1 year from DHIS in the numerator, but the Census 2011 estimates for the number of children under 1 year of age as the denominator.

IndicatorShort O Imm cov yy Imm cov yy Census Imm cov yy Census

IndicatorShort Imm cov yy

119

# 6.2 Measles 1st to 2nd dose drop-out rate

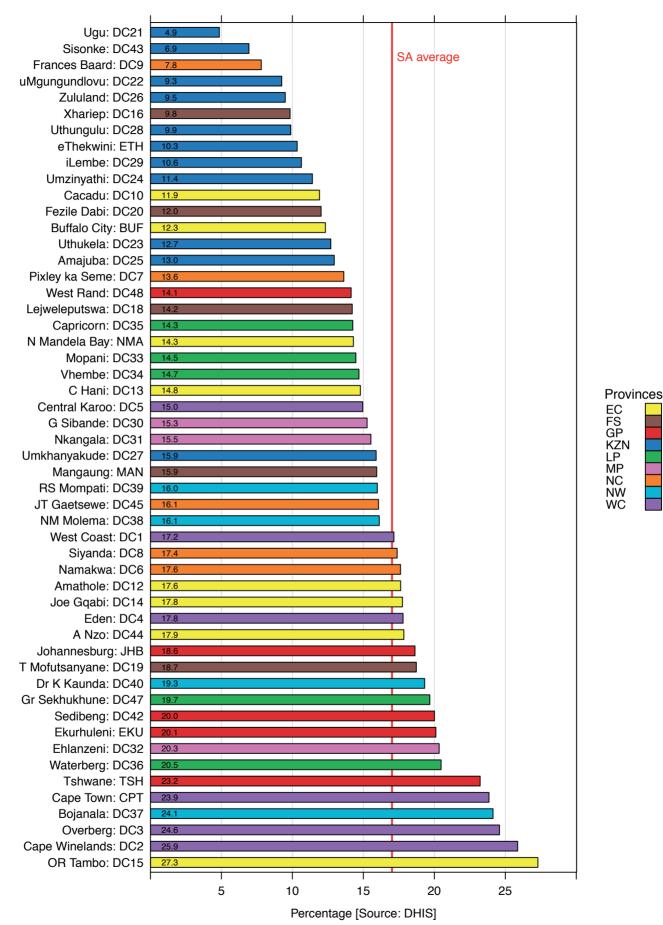
The measles 1st dose is given at nine months of age and the 2nd dose at 18 months. Over the past years, the 2nd dose coverage has been considerably lower than that of the 1st dose. The measles 1st to 2nd dose drop-out rate measures the percentage of children who dropped out between the 1st and the 2nd dose of the measles vaccine, thus the percentage of children who received their 1st measles vaccination but did not receive their 2nd dose. The advantage of this indicator is that both the numerator and the denominator are available from the routine DHIS health data and are therefore not subject to the inherent complications associated with a population-based denominator, as with the immunisation coverage under 1 year indicator.

The national drop-out rate for 2012/13 was 17.0%, an increase from 2011/12 when it was 15.4%. Of concern is that the dropout rate has been increasing since 2009/10 when it was 8.9%. It is difficult to determine whether this is due to variable service delivery and/or poor data quality. From a provincial perspective, the drop-out rate ranges from as low as 10.4% in KwaZulu-Natal to as high as 23.1% in the Western Cape.

At the district level, the range is even larger. As shown in Figure 5, the lowest drop-out rate was 4.9% in Ugu (KZN) and the highest was 27.3% in OR Tambo (EC). Of the NHI districts, uMgungundlovu (KZN) has the lowest drop-out rate (9.3%). Almost three quarters of the districts have a higher rate in 2012/13 compared to 2011/12.

Although no target has been set for this indicator, it is important to achieve consistently high coverage for both the 1st and 2nd doses to prevent outbreaks. For this reason, the National Department of Health conducted a national immunisation catch-up campaign from 29 April to 17 May 2013 which included giving measles vaccines to children aged 9 to 59 months.<sup>b</sup>

b National Department of Health. Childhood Immunisation Campaign to avert diseases and deaths. Pretoria: National Department of Health; 30 April 2013 [cited 29 June 2013]. Available from: http://www.doh.gov.za/show.php?id=4119



#### Figure 5: Measles 1-2 drop-out rate, by district, 2012/13

EC FS GP

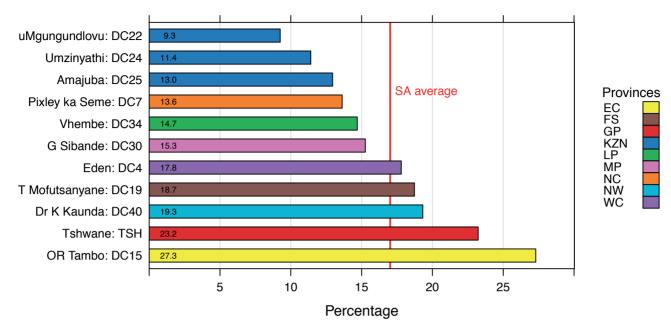
KZN LP

MP

NC

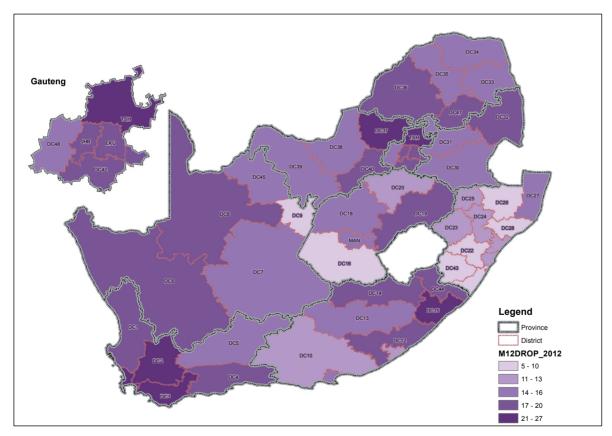
NW

WC

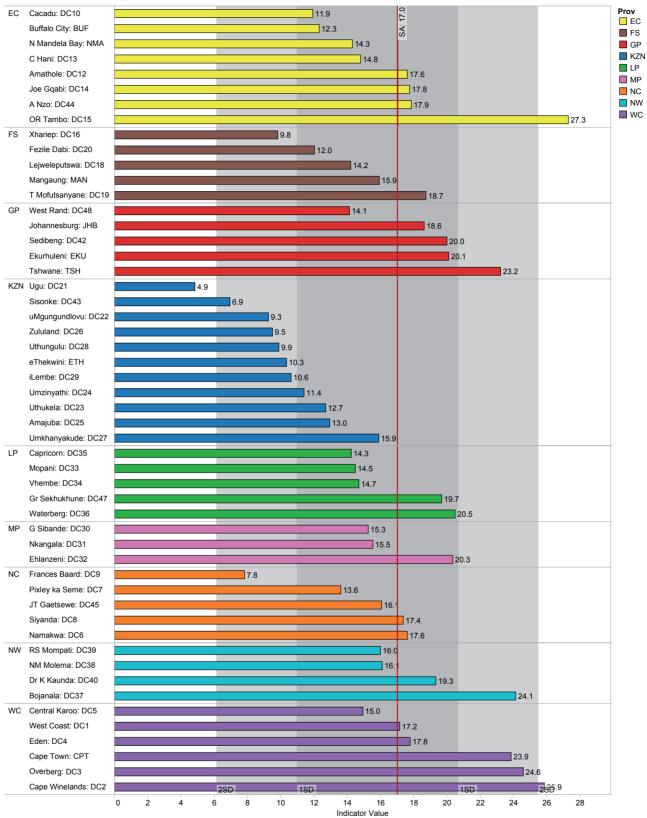


### Figure 6: Measles 1-2 drop-out rate, by NHI district, 2012/13

Map 2: Measles 1-2 drop-out rate, by district, 2012/13



# Figure 7: Measles 1-2 drop-out rate by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: DHIS

# 7 Child Health

## **Neil McKerrow**

## 7.1 Vitamin A coverage 12 to 59 months

Vitamin A is a micronutrient that is essential for healthy eyes, growth, immune function and survival. Deficiency of vitamin A is associated with blindness as well as a fourfold increase in child mortality secondary to prematurity, neonatal infections, diarrhoeal disease and measles. The World Health Organization<sup>a</sup> estimates that vitamin A deficiency is responsible for up to 6% of under-5 deaths in sub-Saharan Africa. Research in the 1980s which suggested that vitamin A supplementation could reduce child mortality by 20 – 30% has formed the basis for vitamin A supplementation programmes throughout the world.

Although the recent DEVTA study<sup>b</sup> has questioned the magnitude of the reduction in child mortality achieved with vitamin A supplementation, it remains a key child survival intervention in South Africa. The Strategic Plan for Maternal, Newborn, Child and Women's Health aims to achieve 80% coverage of at least one dose of vitamin A per year for all children aged 12 – 59 months by 2016.<sup>c</sup>

The vitamin A coverage 12 – 59 months is the proportion of children in the 12 – 59 month age group who received their full quota of two doses of vitamin A supplements per year.

Figure 1 shows that the annual vitamin A coverage in 2012/13 declined to 42.8% from the 2011/12 level of 43.4%, with a wider inter-district range from a low of 21.9% in Pixley ka Seme (NC) to 60.9% in Sedibeng (GP). The national average remains slightly above the 2012/13 target of 42%, but the coverage in 24 districts fell below the national average and failed to reach the target.

Coverage rates in the NHI pilot districts varied from 55.2% in Eden (WC) to 21.9% in Pixley ka Seme (NC), with only Eden (WC), Thabo Mofutsanyane (FS) and Umzinyathi (KZN) surpassing the national average.

There was also no difference in vitamin A coverage between the metro and other districts. Four of the eight metros exceeded the national average with a range from 30.5% in Tshwane to 57.8% in eThekwini.

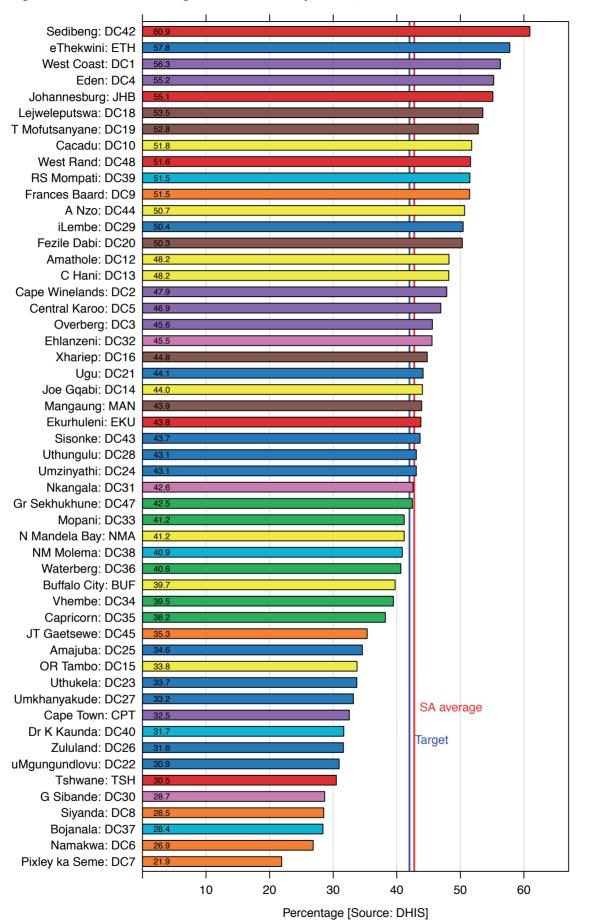
The variation in coverage between provinces ranged from a low of 35.8% in the North West to a high of 49.9% in the Free State.

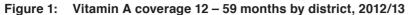
The trend in coverage rates at the district level is illustrated in Figure 4, which shows a reversal in 30 districts of the consistent increase in vitamin A coverage since 2003/04. Every district in Limpopo, as well as the majority of districts in five other provinces (Eastern Cape, Free State, Gauteng, KwaZulu-Natal and North West) saw a decline in vitamin A coverage rates in 2012/13. This supports the recommendation that the National Department of Health considers conducting annual rather than ad hoc vitamin A supplementation campaigns.<sup>c</sup>

a World Health Organization. Global health risks: mortality and burden of disease attributed to selected major risks. Geneva: WHO; 2009.

b Aswasthi S, Peto R, Read S, Clark S, Pande V, Bundu D and the DEVTA team. Vitamin A supplementation every 6 months with retinol in 1 million preschool children in north India: DEVTA, a cluster-randomised trial. Lancet 2013; 381: 1469-77.

c National Department of Health. Strategic Plan for Maternal, Newborn, Child and Women's Health (MNCWH) and Nutrition in South Africa: 2012-2016. Pretoria: NDoH; 2012.







Provinces

EC FS

GP

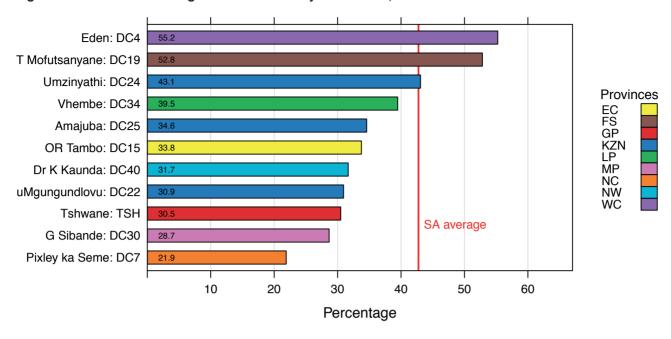
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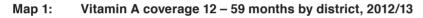
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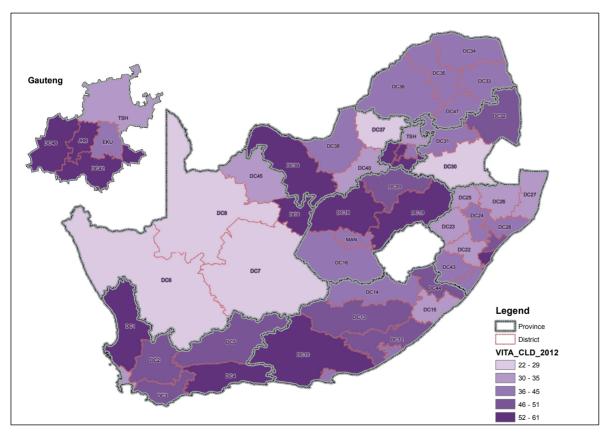
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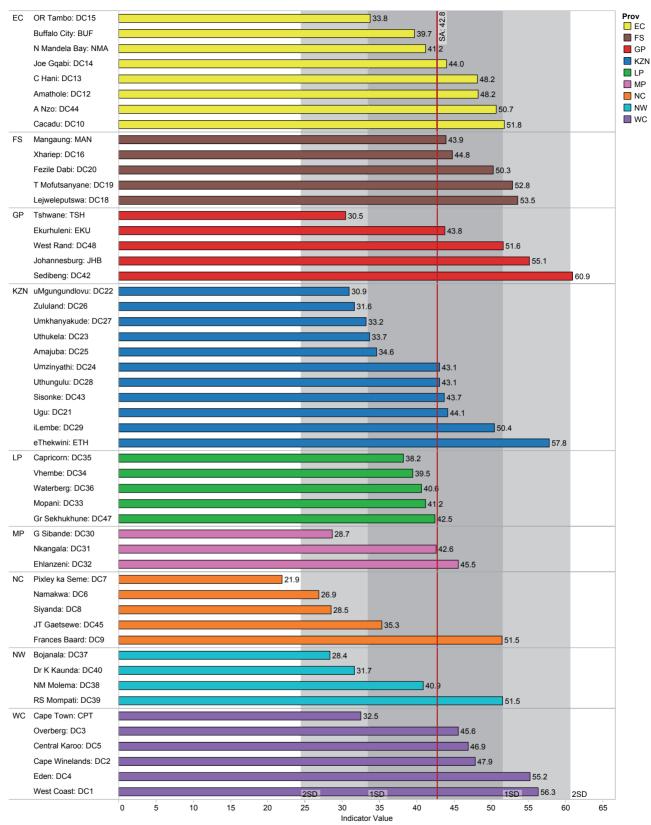


#### Figure 2: Vitamin A coverage 12 – 59 months by NHI district, 2012/13

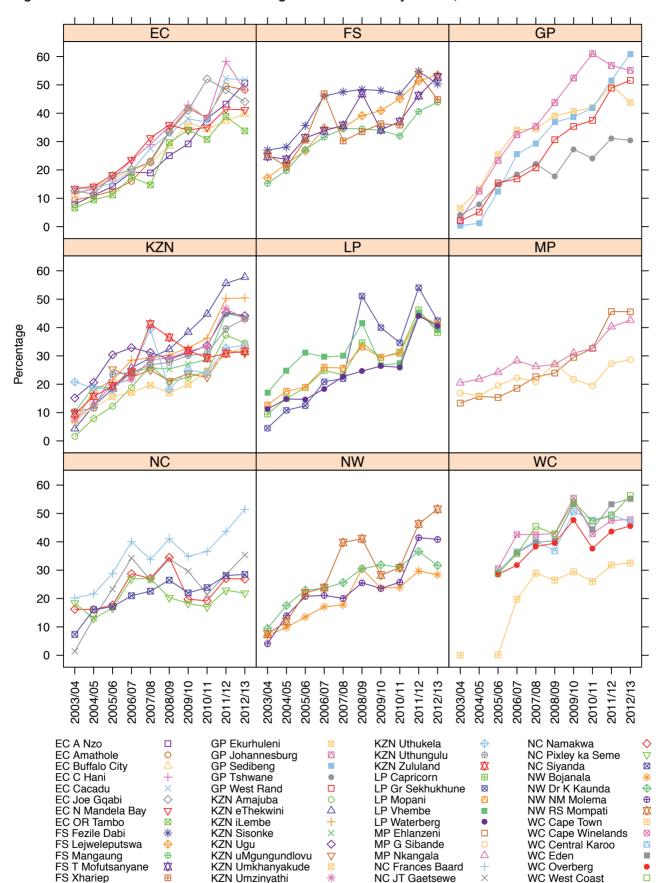




#### Vitamin A coverage 12 - 59 months by district, grouped by province, showing standard Figure 3: deviations from the average, 2012/13



Units: Percentage Source: DHIS





## 7.2 Child under 5 years diarrhoea with dehydration incidence

Globally, one in 10 child deaths results from diarrhoeal disease during the first five years of life, with the majority of these deaths occurring in sub-Saharan Africa and South East Asia.<sup>d</sup> In South Africa, diarrhoeal disease is the top cause of child mortality, accounting for 18.7% of under-5 deaths.<sup>e</sup> As the incidence of diarrhoea is closely linked to socio-economic and environmental factors, household practices and access to health services, the incidence of diarrhoea is a key indicator for monitoring child health and wellbeing.

The child under 5 years diarrhoea with dehydration incidence measures the number of new episodes of diarrhoea with dehydration in children under 5 years per 1 000 children under 5 years in the catchment population. This indicator only considers episodes of diarrhoea that are reported to a health facility and ignores those episodes treated at home.

In 2012/13, the average incidence of diarrhoea with dehydration in children under 5 years in South Africa was 12.0 episodes per 1 000 children under 5 years. This was lower than the 2011/12 figure of 14.0 episodes and continued the downward trend evident since a peak incidence of 21.1 episodes in 2009/10. The provincial incidence varied from a low of 7.7 episodes per 1 000 children under 5 years in North West to a high of 16.8 episodes per 1 000 children under 5 years in the Western Cape. Only the Free State and Northern Cape provinces had an increase in incidence from 2011/12.

At the district level (Figure 5), the incidence varied widely, from a high of 32.9 episodes per 1 000 children under 5 years in the Cape Winelands (WC) to 4.7 episodes per 1 000 children under 5 years in Lejweleputswa (FS). KwaZulu-Natal and the Western Cape included six and three, respectively, of the 10 districts with highest incidence of diarrhoea with dehydration in the country.

Seven of the 11 NHI districts had an incidence below the national average, and the incidence ranged from 6.2 episodes in Dr K Kaunda (NW) to 16.8 episodes in Pixley ka Seme (NC). Only three of the eight metro districts had an incidence that was lower than the national average, with a range from 8.0 episodes in Ekurhuleni (GP) to 18.9 episodes in eThekwini (KZN).

Figure 8 depicts the seasonal or monthly trend in the number of cases of diarrhoea with dehydration, showing a consistent pattern over the past six years with a trough in September sandwiched between two peaks: a winter peak in July and a summer peak in January.

There is no consistent relationship between rotavirus vaccine coverage (Figure 9) and the incidence of diarrhoea with dehydration at district level. Six of the 10 districts with the highest incidence of diarrhoea with dehydration had rotavirus vaccine coverage rates above 100%, whilst only four of the 10 districts with the lowest incidence of diarrhoea with dehydration had rotavirus vaccine coverage rates above 100%. Indeed, three districts among the 10 with the highest incidence of diarrhoea were also among the 10 districts with the highest rotavirus vaccine coverage rates, and three districts among the 10 with the lowest incidence of diarrhoea had rotavirus vaccine coverage rates among the lowest 10 districts in the country. This probably reflects the multifactorial nature of diarrhoeal diseases.

The annual trend in the incidence of diarrhoea with dehydration is shown in Figure 10. The incidence has continued to decline in all five districts in Gauteng, in three of four districts in the North West, and in seven of 11 districts in KwaZulu-Natal. The greatest decline occurred in the eThekwini metro in KwaZulu-Natal, where it fell from 36.3 episodes per 1 000 children under 5 years in 2011/12 to 18.9 episodes per 1 000 children under 5 years in 2012/13. The incidence has risen in all five districts in the Northern Cape, in four of the five Free State districts, and in four of the six districts in the Western Cape. The greatest increase occurred in the Siyanda district in the Northern Cape, where it rose from 8.3 episodes in 2011/12 to 14.4 episodes in 2012/13.

d Liu L, Johnson HL, Cousens S, et al. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. Lancet 2012; 379: 2151–61.

e Statistics South Africa. Mortality and causes of death in South Africa, 2010: Findings from death notification. Pretoria: Stats SA; 2013.

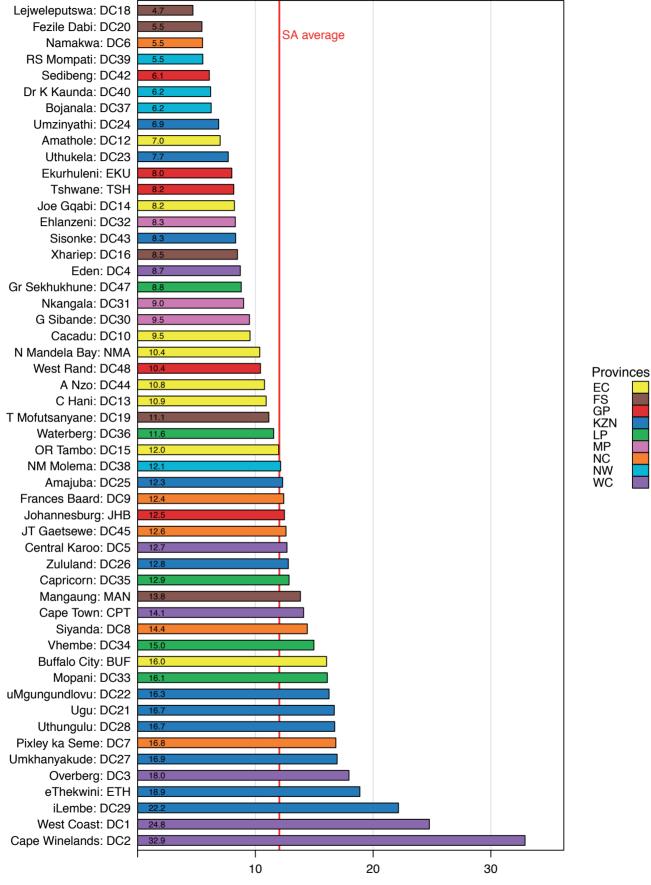


Figure 5: Child under 5 years diarrhoea with dehydration incidence (annualised) by district, 2012/13

Number of cases per 1 000 children [Source: DHIS]

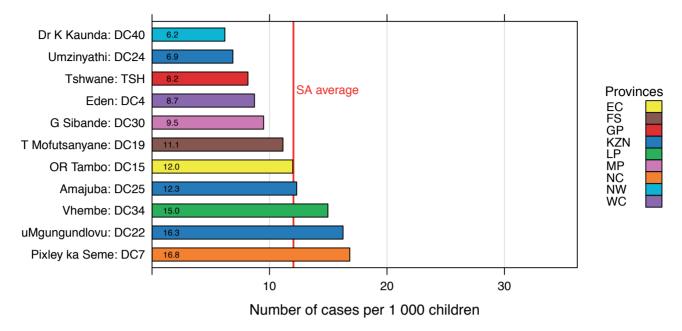
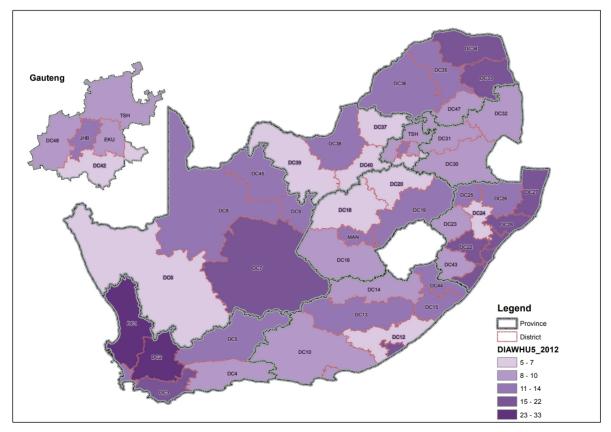


Figure 6: Child under 5 years diarrhoea with dehydration incidence (annualised) by NHI district, 2012/13

## Map 2: Child under 5 years diarrhoea with dehydration incidence (annualised) by district, 2012/13



# Figure 7: Child under 5 years diarrhoea with dehydration incidence (annualised) by district, grouped by province, showing standard deviations from the average, 2012/13

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Units: Number of cases per 1 000 children Source: DHIS

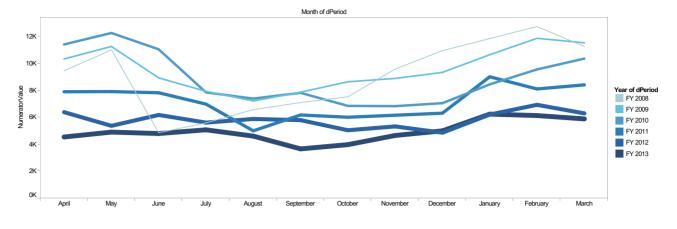
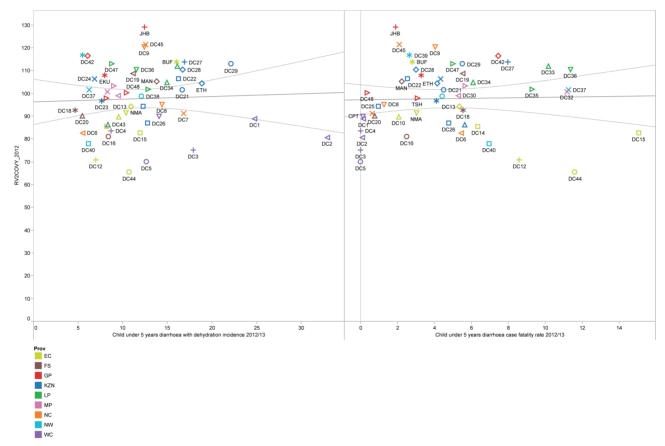


Figure 8: Monthly trend in child under 5 years diarrhoea with dehydration cases, 2007/08 – 2012/13

Figure 9: Scatter: RV 2nd dose coverage (annualised) versus child under 5 years diarrhoea with dehydration incidence



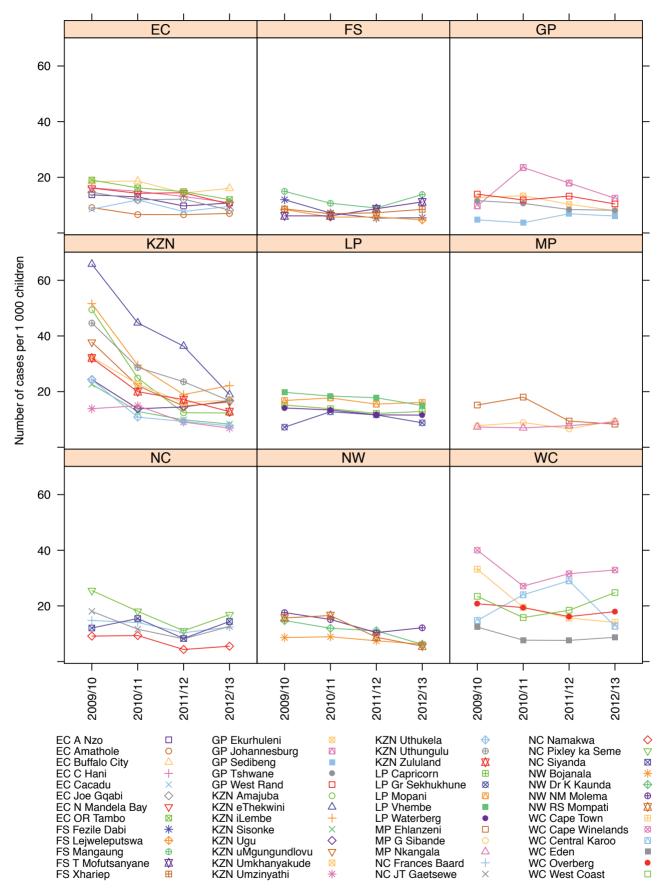


Figure 10: Annual trends: Children under 5 years diarrhoea with dehydration incidence under 5 years by district

## 7.3 Child under 5 years diarrhoea case fatality rate

Given current progress, it is unlikely that South Africa will reach the fourth Millennium Development Goal target of a twothirds reduction in under-5 mortality.<sup>f</sup> However, the National Department of Health continues to introduce numerous interventions in an effort to narrow the gap between the 1990 baseline under-5 mortality rate (U5MR) of 59 per 1 000 live births and the 2015 target of 20 per 1 000 live births.

One of these new interventions, which is aimed at improving performance at hospital level, is the introduction of improved monitoring through the introduction of mortality targets. As the major causes of under-5 mortality are neonatal deaths, diarrhoeal disease, acute respiratory infections and malnutrition, all hospitals are expected to achieve a prescribed reduction in the in-hospital mortality rate for these conditions. The prescribed reduction has been calculated on a sliding scale using the hospital's own historical data as the baseline.

The child under 5 years diarrhoea case fatality rate measures the proportion of all diarrhoea-related admissions of children under 5 years who died, and the proposed reductions in the death rate among children under 5 years admitted for diarrhoeal disease are:<sup>9</sup>

- All institutions with case fatality rates <10% must aim to decrease their rate relative to the baseline by 5% for 2013/14
- All institutions with case fatality rates of 10% and above must aim to decrease their rate relative to the baseline by 10% for 2013/14

The average case fatality rate for diarrhoea with dehydration in children under-5 years in South Africa was 4.3% in 2012/13. This rate reflects a sustained trend of a yearly decrease since 2007/08 when the rate was 8.9%.

This national figure hides a range from 0.1% in the Western Cape to 7.8% in Limpopo. The case fatality rate declined in seven provinces, apart from KwaZulu-Natal where it was static at 4.3%, and the North West Province where it increased by 0.9 percentage points from 4.9% in 2011/12 to 5.8% in 2012/13. Four provinces, the Eastern Cape, Gauteng, Limpopo and the Western Cape, have seen a sustained decrease in case fatality rates for diarrhoea since 2007/08, whilst the Free State and Mpumalanga have seen a decline over a two-year period since 2010/11, and the Northern Cape has had a decline over a single year.

Figure 11 shows the seasonal variation in the number of deaths due to diarrhoea in children under 5 years, with a trough in September and two peaks, a winter peak in August and a summer peak in January. The trough and summer peak both correspond to the seasonal variation in the incidence of diarrhoea with dehydration shown in section 7.2, but the winter peak shows a one-month lag after the winter diarrhoea season, possibly reflecting both a lower winter case-load and a less severe disease pattern.

The range of case fatality rates in the country's 52 districts are reflected in Figure 12, which shows a range from zero deaths in Overberg, Eden and the Central Karoo (all in the Western Cape) to a high of 15.1% in OR Tambo (EC). Twenty-seven districts had a case fatality rate below the national average, including all six districts in the Western Cape, six districts in KwaZulu-Natal, four out of five districts in both the Northern Cape and Gauteng, and three of the five districts in the Free State. All districts in both Mpumalanga and Limpopo, as well as three of four districts in the North West, had case fatality rates that were higher than the national average. Districts in the Western Cape comprised the six districts with the lowest case fatality rate.

There was a weak negative correlation between the incidence of diarrhoea and the case fatality rates for diarrhoea in children under 5 years. The Western Cape had the lowest case fatality rate but, with an incidence of 16.8 episodes per 1 000 children under 5 years, it had the highest incidence and greatest case load of diarrhoea disease. Whilst the Eastern Cape had the two districts with the highest case fatality rates and three districts among the 10 worst-performing districts, it was ranked fifth in terms of burden of disease, with an incidence of 10.7 episodes per 1 000 children under 5 years which was lower than the national average incidence.

The NHI districts included the districts with both the lowest, Eden (WC), and highest, OR Tambo (EC), case fatality rates for diarrhoea.

The annual trends in the under-5 case fatality rates for diarrhoea for districts are presented in Figure 15. The greatest reduction in case fatality rate was seen in JT Gaetsewe (NC), where it fell by 11.1 percentage points from 13.2% in 2011/12 to 2.1% in 2012/13. The greatest increase in case fatality rates was a rise of 4.4 percentage points in Bojanala (NW).

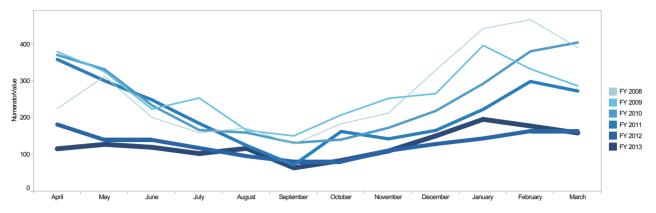
As the overall trend at both provincial and district level is towards a reduction in case fatality rates, there is a realistic chance that if this is sustained, the country can meet the WHO/UNICEF 2025 target of a case fatality rate for diarrhoeal diseases of less than 1%.<sup>h</sup>

f Statistics South Africa. Republic of South Africa Millennium Development Goals: Country Report 2010. Pretoria: Stats SA; 2010.

g Personal communication: Dr Y Pillay, Deputy Director-General: HIV/AIDS, TB & MCWH, National Department of Health, 12 February 2013.

h World Health Organization/United Nations Children's Fund. End Preventable Child Deaths from Pneumonia and Diarrhoea by 2025. The Integrated Global Action Plan for Pneumonia and Diarrhoea. France: WHO/UNICEF; 2013.

Figure 11: Monthly trends in child under 5 years deaths due to diarrhoea with dehydration, 2007/08 – 2012/13



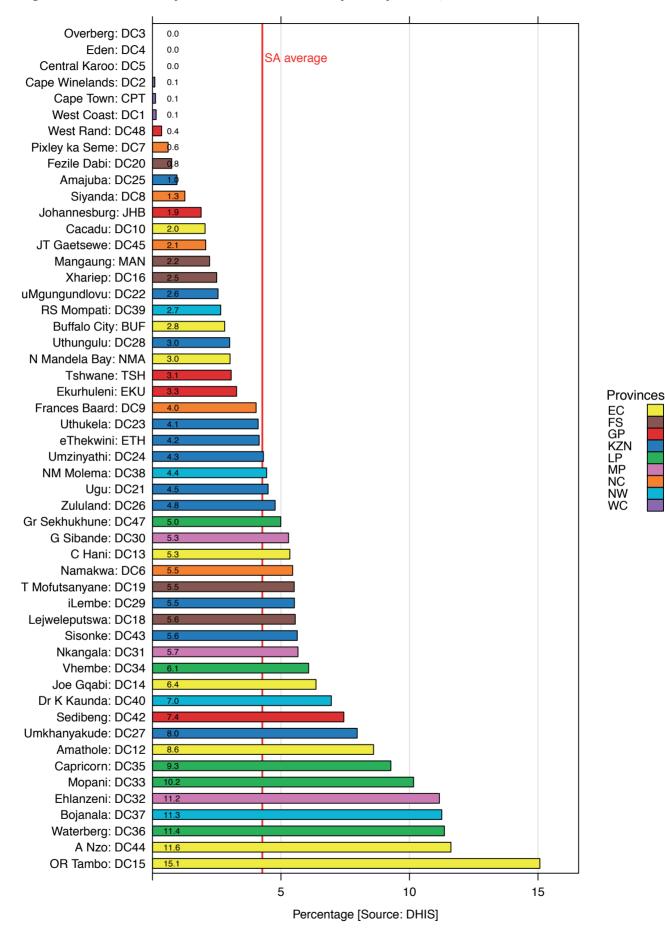
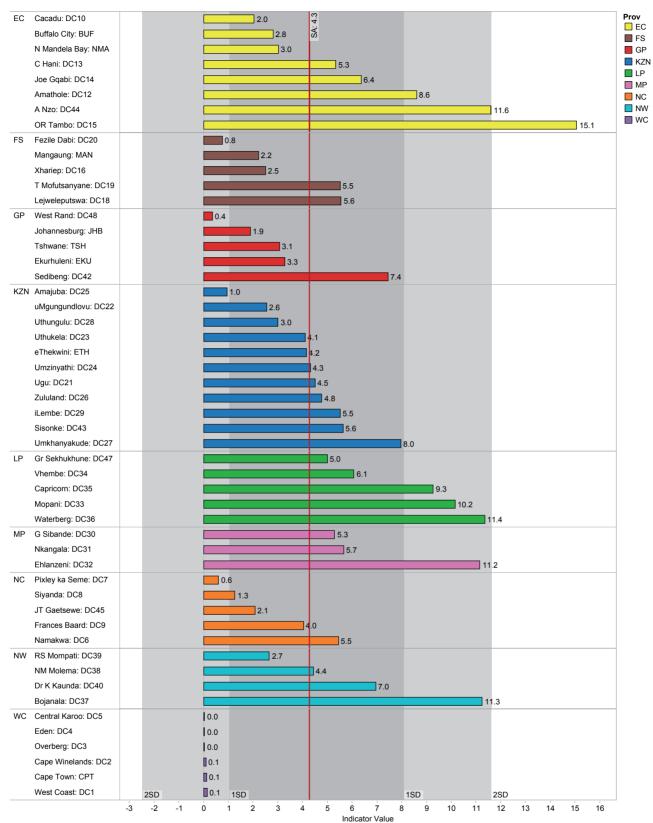
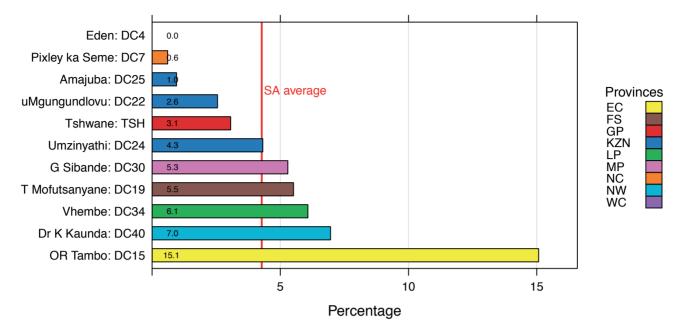


Figure 12: Child under 5 years diarrhoea case fatality rate by district, 2012/13

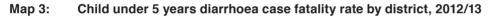
Figure 13: Child under 5 years diarrhoea case fatality rate by district, grouped by province, showing standard deviations from the average, 2012/13

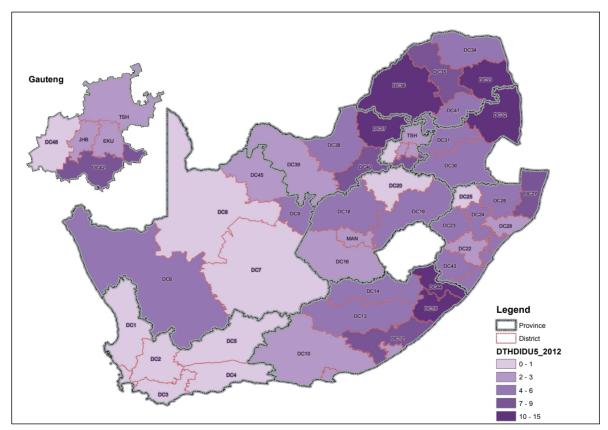


Units: Percentage Source: DHIS

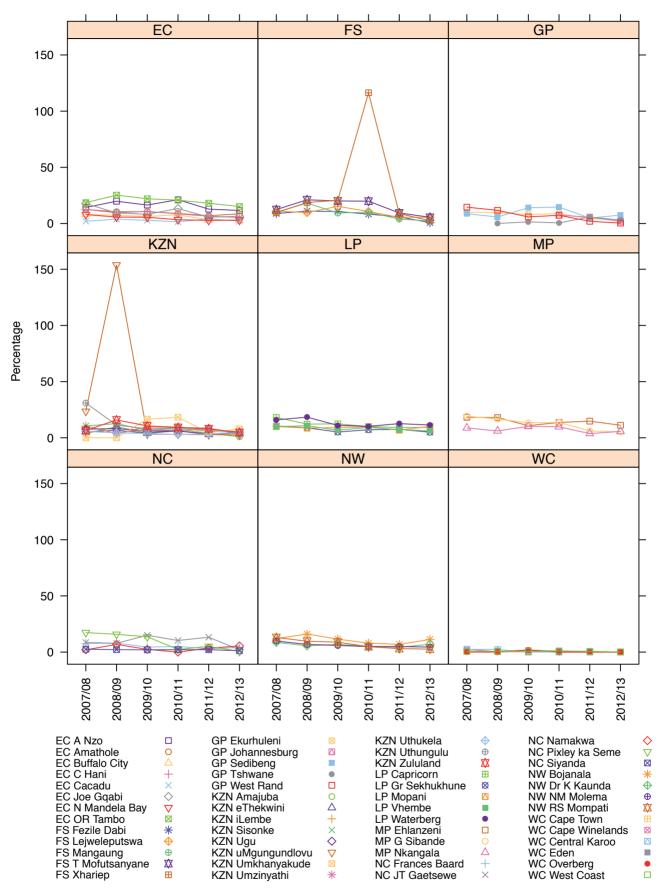


### Figure 14: Child under 5 years diarrhoea case fatality rate by NHI district, 2012/13









## 7.4 Child under 5 years pneumonia incidence

Globally, pneumonia accounts for 18% of all deaths among children under 5 years of age and is the single greatest cause of death in this age group.<sup>h</sup> In South Africa, pneumonia is the second highest cause of under-5 deaths after diarrhoeal disease and is responsible for 11.7% of deaths in the first five years of life.<sup>e</sup> The incidence of pneumonia in children under 5 years is therefore a key indicator of the burden of disease in children.

The child under 5 years pneumonia incidence measures the number of new episodes of pneumonia in children under 5 years per 1 000 children under 5 years in the catchment population. For the purpose of this indicator, pneumonia is defined as coughing or difficult and fast breathing, and any one of the following general danger signs: the child is unable to drink or breastfeed, the child vomits everything, or the child has convulsions during this illness.

The average incidence of pneumonia in children under 5 years in South Africa was 66.8 cases per 1 000 children under 5 years in 2012/13, which continued the downward trend from a peak incidence of 97.4 cases per 1 000 children under 5 years in 2009. The provincial incidence varied from a low of 30.8 cases per 1 000 children under 5 years in Mpumalanga, to a high of 119.0 cases per 1 000 children under 5 years in KwaZulu-Natal. All provinces showed a decline in incidence.

At the district level, the pneumonia incidence varied widely, from a high of 177.9 cases per 1 000 children under 5 years in Ugu (KZN) to a low of 21.0 cases per 1 000 children under 5 years in Gert Sibande (MP). Although 23 districts had an incidence above the national average, these were mainly clustered in four provinces and included all 11 districts in KwaZulu-Natal, and three each in the Eastern Cape, Northern Cape and the Free State. Eight of the 10 districts with the highest pneumonia incidence were in KwaZulu-Natal.

There was no difference in pneumonia incidence between NHI pilot districts and non-NHI pilot districts. The NHI districts' incidence ranged from 21.0 cases per 1 000 children under 5 years in Gert Sibande (MP) to 156.4 cases per 1 000 children under 5 years in uMungundlovu (KZN).

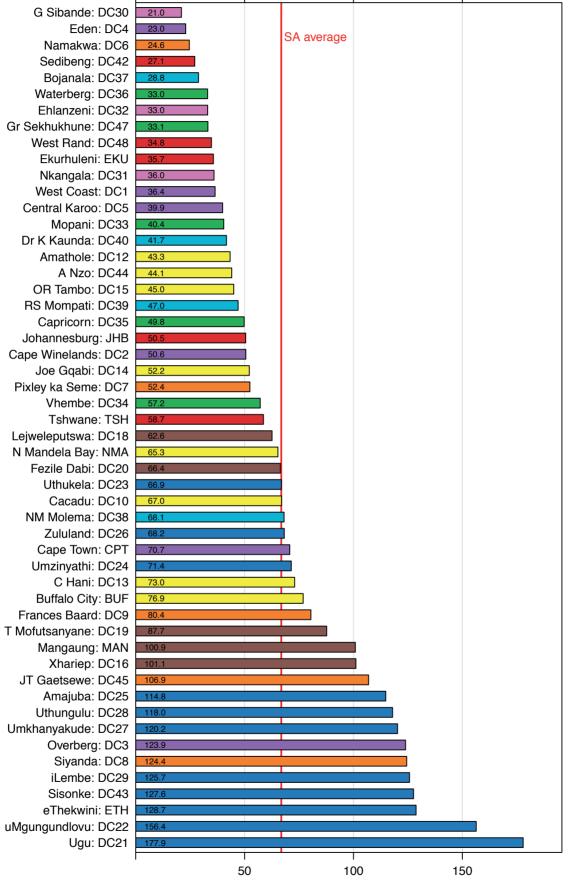
There is little correlation between pneumococcal conjugate vaccine (PCV) coverage rates (Figure 19) and the incidence of pneumonia in children under 5 years. Five of the 10 districts with the highest incidence of pneumonia in children under 5 years had PCV coverage rates above the national average coverage rate and greater than 100%. Similarly, the three districts with the lowest incidence of pneumonia in children under 5 years all had PCV coverage rates below the national average.

The annual trend in the incidence of pneumonia (Figure 20) showed an ongoing decline between 2011/12 and 2012/13. However, in 10 districts across all provinces except Limpopo and the North West, there was an increase in incidence over this period. The greatest increase occurred in Siyanda (NC) from an incidence of 102.9 episodes in 2011/12 to 124.4 episodes in 2012/13. In two districts, this increase was sustained for the second consecutive year: in Cacadu (EC) the incidence increased from 41.2 episodes in 2010/11 to 56.5 episodes in 2011/12 and 67.0 episodes in 2012/13, while in JT Gaetsewe (NC), the incidence rose from 96.8 episodes in 2010/11 to 106.9 episodes in 2012/13. The greatest drop in incidence occurred in Overberg (WC) where it fell from 182.1 episodes in 2011/12 to 123.9 episodes in 2012/13. However, this level is still nearly double the national average.

There has been a consistent decline in the incidence of pneumonia in all five socio-economic quintiles over the past six years, with very little difference between quintiles.

Despite the declining incidence reflected in the above figures, the incidence of cases of pneumonia in children under 5 years remains high. Since the introduction of the PCV, the incidence has dropped by 31.4%, although these data do not indicate how much of the decline may be attributable to the vaccine.

#### Figure 16: Child under 5 years pneumonia incidence (annualised) by district, 2012/13



Provinces

EC FS

GP

LP MP

NC

NW

WC

KZN

Number of cases per 1,000 children [Source: DHIS]

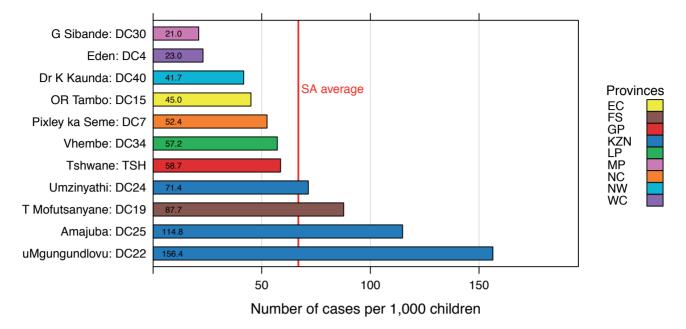


Figure 17: Child under 5 years pneumonia incidence (annualised) by NHI district, 2012/13

## Map 4: Child under 5 years pneumonia incidence (annualised) by district, 2012/13

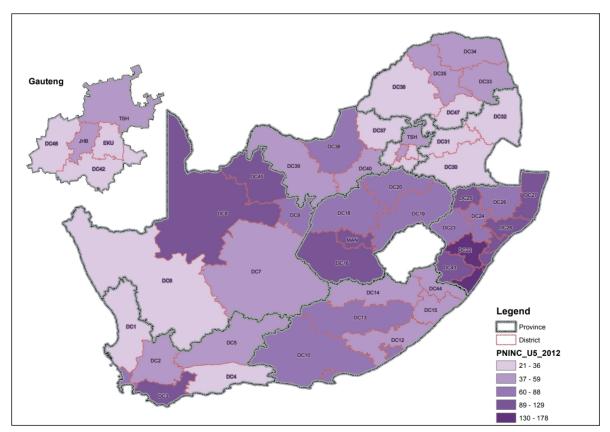
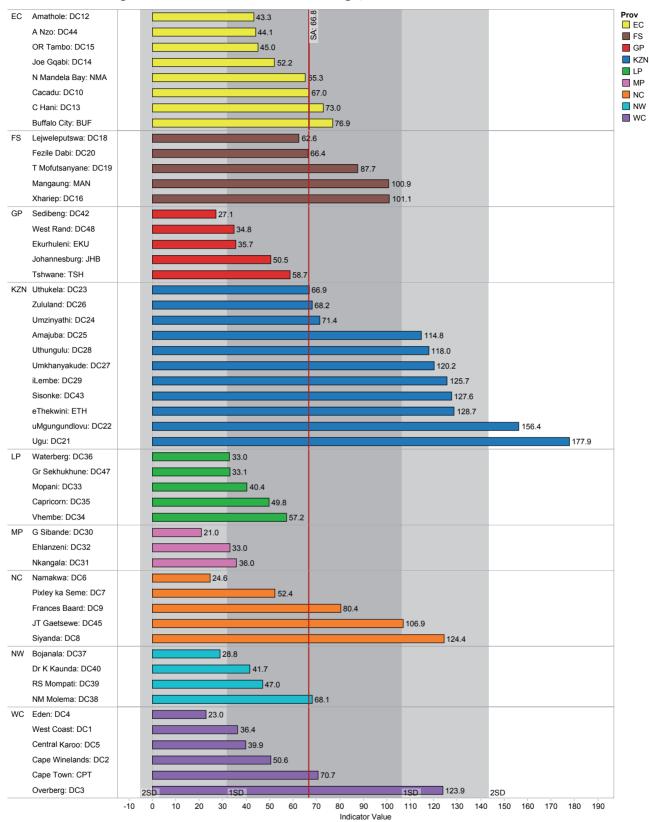


Figure 18: Child under 5 years pneumonia incidence (annualised) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Number of cases per 1,000 children

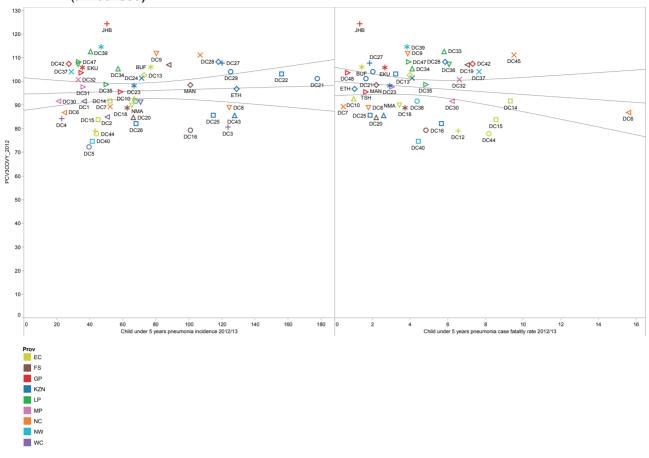
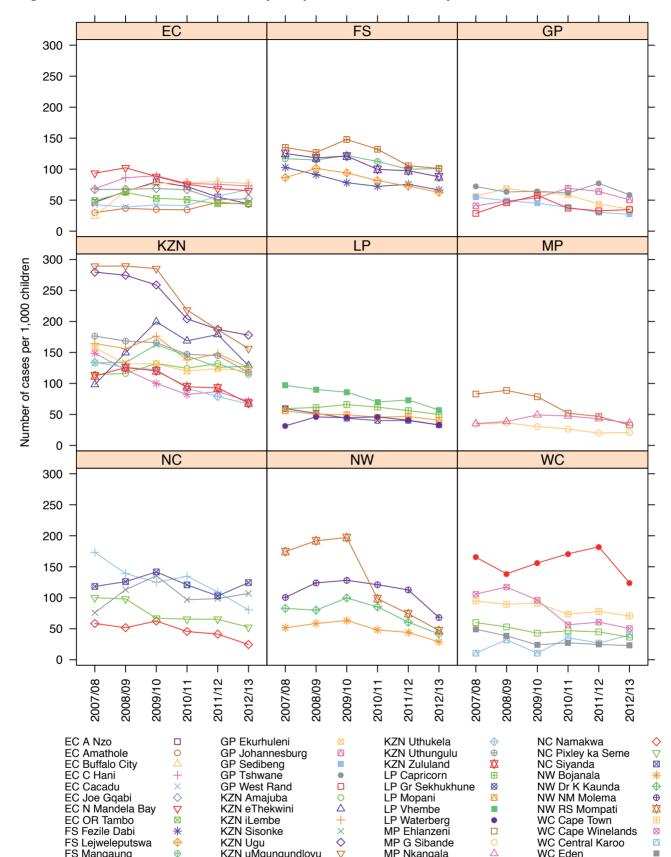


Figure 19: Scatter: PCV 3rd dose coverage (annualised) versus child under 5 years pneumonia incidence (annualised)



0 ∆

+

X

WC Central Karoo WC Eden

WC Overberg

WC West Coast

•

MP G Sibande

MP Nkangala NC Frances Baard

NC JT Gaetsewe

#### Figure 20: Annual trends: Child under 5 years pneumonia incidence by district

FS Fezile Dabi

FS Mangaung

FS Xhariep

FS Lejweleputswa

FS T Mofutsanyane

邥

⊞

KZN Sisonke

KZN uMgungundlovu KZN Umkhanyakude

KZN Umzinyathi

 $\nabla$ 

X

\*

KZN Ugu

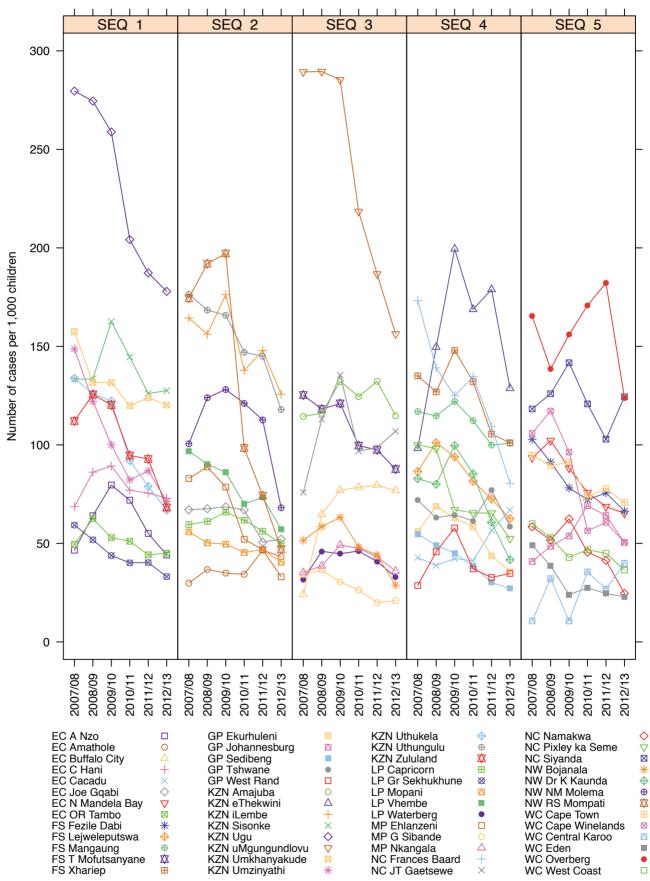


Figure 21: Annual trends: Child under 5 years pneumonia incidence (annualised) by socio-economic quintile

## 7.5 Child under 5 years pneumonia case fatality rate

Pneumonia is one of the major contributors to under-5 mortality, and as such, is targeted by interventions initiated by the National Department of Health to improve the performance of health facilities. The newly introduced approach to monitoring progress towards attaining mortality targets requires that all hospitals and districts achieve a prescribed reduction in the in-hospital mortality rate for pneumonia, calculated on a sliding scale using the hospital's own historical data as the baseline.

The child under 5 years pneumonia case fatality rate measures the proportion of all pneumonia-related admissions of children under 5 years who died, and the proposed prescriptions for reduction in the death rate among under-5 children admitted for pneumonia are:<sup>g</sup>

- All institutions with case fatality rates <10% must decrease their rate relative to the baseline by 5% for 2013/14
- All institutions with case fatality rates of ≥10% must decrease their rate relative to the baseline by 10% for 2013/14

In 2012/13, the average case fatality rate for pneumonia in children under 5 years in South Africa was 3.8%, which continued the downward trend evident since 2009/10 when it was 6.6%.

Whilst no data are available for the Western Cape for 2012/13, the national figure spans a range from 2.3% in Gauteng to 5.3% in Mpumalanga. Although the case fatality rate declined in six provinces, it increased by 1.6 percentage points in the Northern Cape, from 2.8% in 2011/12 to 4.4% in 2012/13. The greatest decline occurred in the Free State, where it fell by 7.1 percentage points from 10.6% in 2010/11 to 3.5% in 2012/13. Four provinces, the Eastern Cape, Gauteng, KwaZulu-Natal and Limpopo, have experienced a reduction in the case fatality rate every year since 2009/10.

As no figures are available for the Western Cape, Figure 22 depicts the case fatality rates for pneumonia in the remaining 46 districts in the country. The lowest and highest case fatality rates both occurred in districts in the Northern Cape, where Pixley ka Seme had a case fatality rate of 0.5% and Namakwa a rate of 15.6%.

As shown in Figure 23, OR Tambo was the NHI district with the highest case fatality rate for pneumonia. Four NHI districts achieved case fatality rates for pneumonia below the national average.

Figure 25 depicts the year-on-year decline in the number of deaths due to pneumonia at national level, as well as the seasonal variation showing peaks in June and February and a trough in July for 2012/13.

The annual trends in the case fatality rates for pneumonia by district are presented in Figure 26. This shows a sustained decline in case fatality rates in both the Free State and Limpopo, and increasing rates in the Eastern and Northern Cape. The case fatality rates fell in 33 districts and rose in 13 districts, including three in the Eastern Cape, two in Limpopo, the Northern Cape and the North West Province, and one in each of the remaining provinces except the Western Cape. The greatest reduction of 9.4 percentage points occurred in Mangaung, where the case fatality rate fell from 11.6% in 2011/12 to 2.2% in 2012/13. The largest increase was seen in Namakwa in the Northern Cape, which had a 14.7 percentage point rise from 0.9% in 2011/12 to 15.6% in 2012/13.

Given the current case fatality rates and the general trend at both provincial and district levels towards a reduction in case fatality rates, there is a realistic chance that if this is sustained, the country can meet the WHO/UNICEF 2025 target of a case fatality rate for pneumonia of less than 3%.<sup>h</sup>

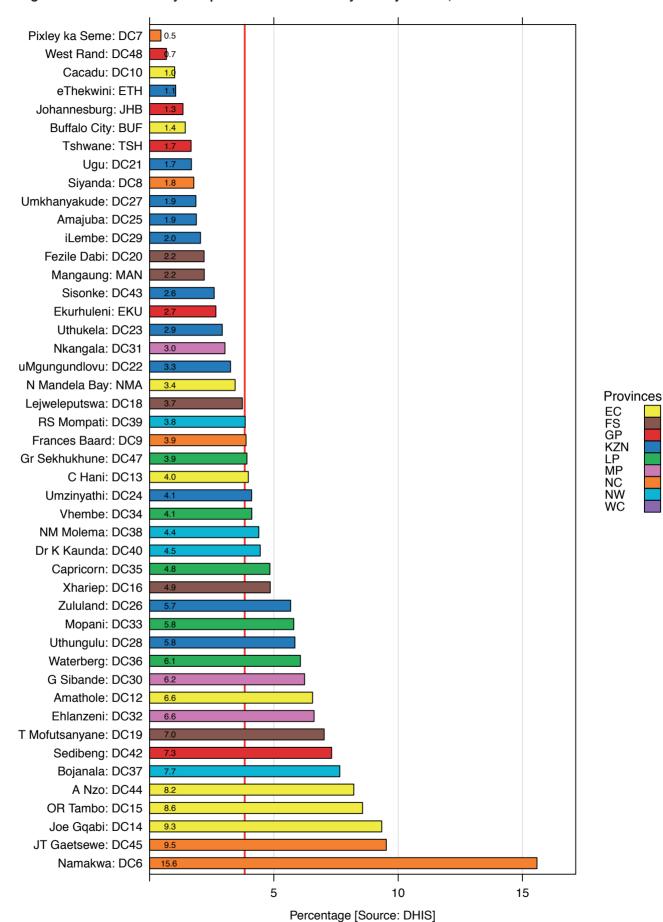
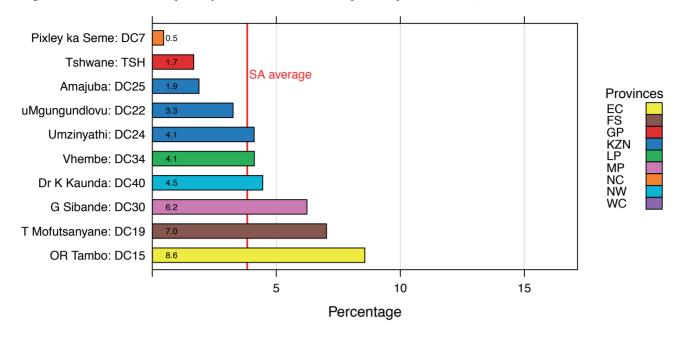
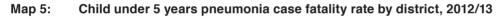
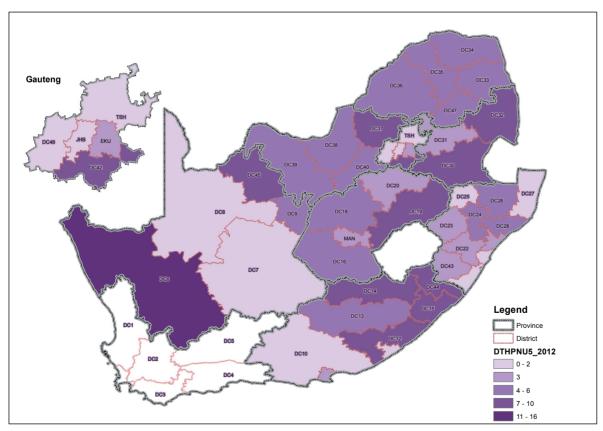


Figure 22: Child under 5 years pneumonia case fatality rate by district, 2012/13



#### Figure 23: Child under 5 years pneumonia case fatality rate by NHI district, 2012/13





# Figure 24: Child under 5 years pneumonia case fatality rate by district, grouped by province, showing standard deviations from the average, 2012/13

EC	Cacadu: DC10				1.0	SA: 3.8								
	Buffalo City: BUF				1.4	SA:								
	N Mandela Bay: NMA					3. <mark>4</mark>								
	C Hani: DC13					4.0								
	Amathole: DC12						6.6							
	A Nzo: DC44							8.2	2					
	OR Tambo: DC15								8.6					
	Joe Gqabi: DC14								9.3					
FS	Fezile Dabi: DC20				2.2									
	Mangaung: MAN				2.2									
	Lejweleputswa: DC18					3.7								
	Xhariep: DC16					4.9								
	T Mofutsanyane: DC19						7	.0						
GP	West Rand: DC48			0.7	7									
	Johannesburg: JHB				1.3									
	Tshwane: TSH				1.7									
	Ekurhuleni: EKU				2.7									
	Sedibeng: DC42							7.3						
KZN	eThekwini: ETH				1.1									
	Ugu: DC21				1.7									
	Umkhanyakude: DC27				1.9									
	Amajuba: DC25				1.9									
	iLembe: DC29				2.0									
	Sisonke: DC43				2.6									
	Uthukela: DC23				2.9									
	uMgungundlovu: DC22					.3								
	Umzinyathi: DC24					4.1								
	Zululand: DC26						5.7							
	Uthungulu: DC28						5.8							
LP	Gr Sekhukhune: DC47					3.9								
	Vhembe: DC34					4.1								
	Capricorn: DC35					4.8								
	Mopani: DC33						5.8							
	Waterberg: DC36						6.1							
MP	Nkangala: DC31				3.0									
	G Sibande: DC30						6.2							
	Ehlanzeni: DC32						6.6							
NC	Pixley ka Seme: DC7			0.5										
	Siyanda: DC8				1.8									
	Frances Baard: DC9					3.9								
	JT Gaetsewe: DC45								9.5	5				
	Namakwa: DC6													15.6
NW						3.8								
	NM Molema: DC38					4.4								
	Dr K Kaunda: DC40					4.5								
	Bojanala: DC37		250		1SD			-18 <sup>7</sup> .7		2SD				
	,	-2	2SD -1	0 1	1 1	4 5	6 7	8	9 1	0 11	12	13 14	15	16 17

Units: Percentage Source: DHIS

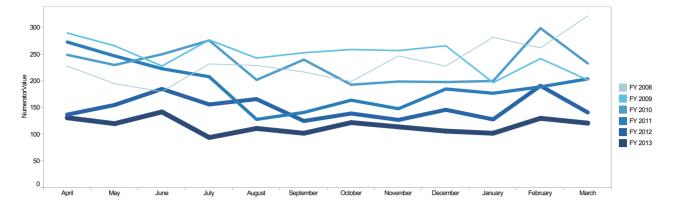
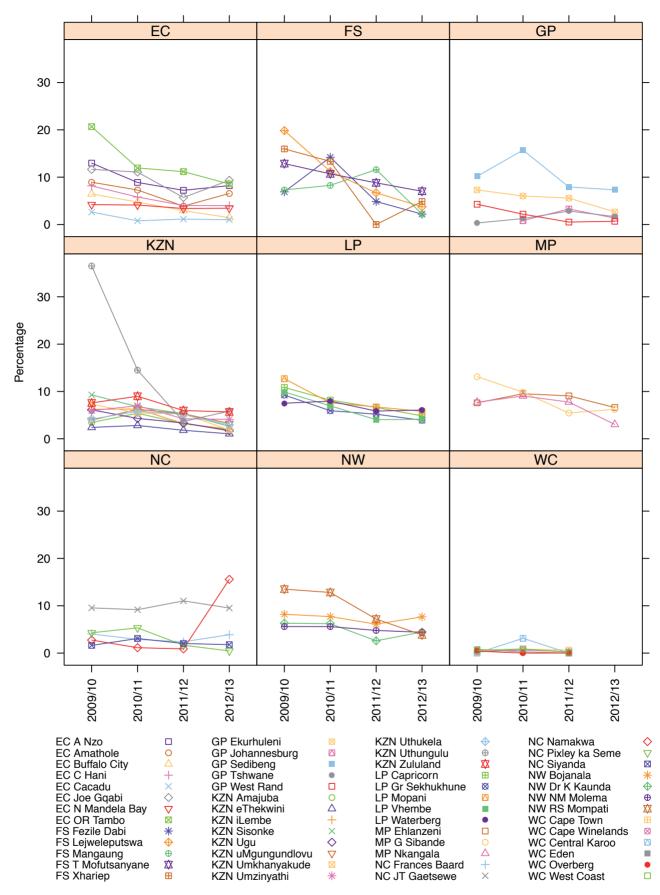
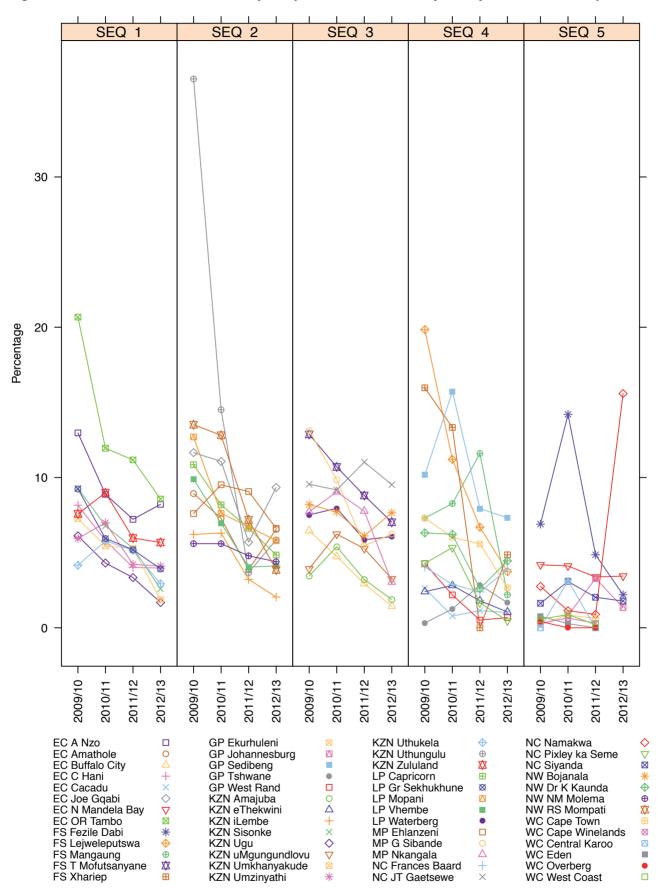


Figure 25: Monthly trends in child under 5 years deaths due to pneumonia, 2007/08 – 2012/13



#### Figure 26: Annual trends: Child under 5 years pneumonia case fatality rate by province and district

Figure 27: Annual trends: Child under 5 years pneumonia case fatality rate by socio-economic quintile



## 7.6 Child under 5 years severe acute malnutrition incidence

Whilst there are limited current data on the growth and nutritional status of children in South Africa, the 2005 National Food Consumption Survey<sup>i</sup> estimated that 18% of children were stunted, 9.3% were underweight and 4.5% were wasted. At the hospital level, data from the Saving Children report indicates that 63.5% of under-5 deaths occur in children who are malnourished, with one third of these deaths occurring in children classified as being severely malnourished.<sup>j</sup> Malnutrition is therefore a major contributor to child mortality, and this outcome indicator is vital in tracking efforts directed towards eradicating extreme poverty and hunger in South Africa as part of the Millennium Development Goals.<sup>f</sup>

This indicator measures the number of new cases of children who weigh below 60% of their expected weight-for-age per 1 000 children under 5 years in the target population. The numerator for this indicator is new ambulatory cases of severe malnutrition in children under 5 years of age. The denominator uses the population under 5 years from the country's population estimates.

In 2012/13, the average incidence of severe acute malnutrition in children under 5 years in South Africa was 4.4 cases per 1 000 children under 5 years which, although up from the 2011/12 incidence of 4.3 cases per 1 000 children under 5 years, remains below the 2009/10 rate of 5.5 per 1 000 children under 5 years.

The incidence of severe acute malnutrition in the provinces ranged from a low of 2.5 cases per 1 000 children under 5 years in Gauteng to 7.2 cases per 1 000 children under 5 years in the Northern Cape. In Limpopo, the 2012/13 incidence continued the upward trend presented since 2009/10, when incidence of severe acute malnutrition measured 4.0 cases per 1 000 children under 5 years. Three other provinces, the Eastern Cape, Mpumalanga and the Northern Cape, also had an increased incidence in 2012/13, reversing the falling trend evident in these provinces since 2009/10.

Figure 28 illustrates the incidence of severe acute malnutrition in all districts across South Africa, with the two districts with the highest and lowest incidences (Pixley ka Seme with 18.1 cases per 1 000 children under 5 years and Namakwa with 0.9 cases per 1 000 children under 5 years), both being in the Northern Cape. Five of the 10 districts with the highest incidence of severe acute malnutrition were in KwaZulu-Natal.

The incidence in the NHI pilot districts (Figure 29) ranged from 1.5 cases per 1 000 children under 5 years in Tshwane (GP) to 18.1 cases per 1 000 children under 5 years in Pixley ka Seme (NC). Six of the 11 NHI districts exceeded the national average. There was very little difference in the incidence between the metro and non-metro districts.

The annual trend in the incidence of severe acute malnutrition is shown in Figure 31. In 25 districts (approximately half the districts in the country), the 2012/13 incidence was higher than that of 2011/12. These districts are located in every province except Gauteng. There has been a sustained increase since 2009/10 in four districts: Cacadu (EC), where the incidence rose from 4.1 in 2009/10 to 8.3 in 2012/13; Mopani and Greater Sekhukune in Limpopo, where the incidence rose from 3.7 and 2.1 respectively to 5.6 and 4.0 over the same period; and Pixley ka Seme (NC) where the incidence has risen from 5.8 in 2009/10 to 18.1 in 2012/13.

The incidence of severe acute malnutrition is higher in the most deprived districts (SEQ1) than in districts with the wealthiest quintile (SEQ5). However, incidence varies within the other quintiles.

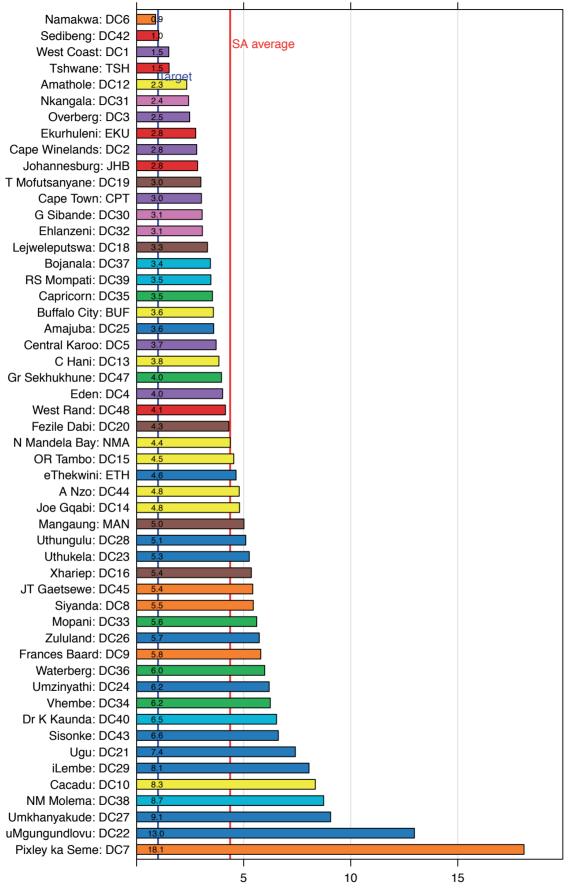
The trends reflected for this indicator suggest that the country and most districts are a long way from achieving the target set by the Health Data Advisory and Coordinating Committee (HDACC)<sup>k</sup> of a 5% reduction between 2009 and 2014 in the prevalence of both underweight and stunting in children under five years of age.

i National Department of Health. National Food Consumption Survey – Fortification Baseline (NFCS-FB): South Africa: NDoH; 2005. Unpublished.

j de Maayer T and Chiba A. Malnutrition. In: Stephen CR, Bamford LJ, Patrick ME, Wittenberg D, eds. Saving Children 2009: Five Years of Data – A sixth survey of child healthcare in South Africa. Pretoria: Tshepes Press, MRC, CDC; 2011.

k National Department of Health. Health Data Advisory and Coordinating Committee Report. Pretoria: NDOH; 2012.

#### Figure 28: Child under 5 years severe acute malnutrition incidence (annualised) by district, 2012/13



Provinces

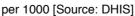
EC FS GP KZN LP

ΜP

NC

NŴ

WC



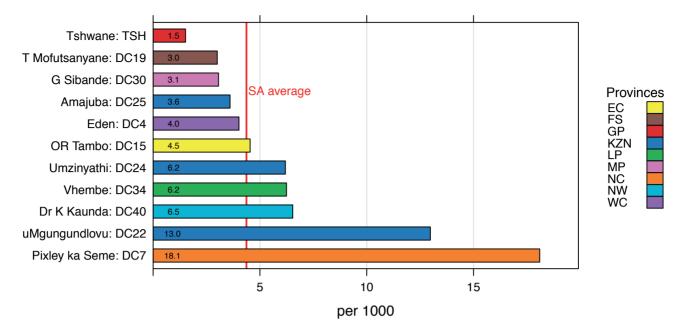
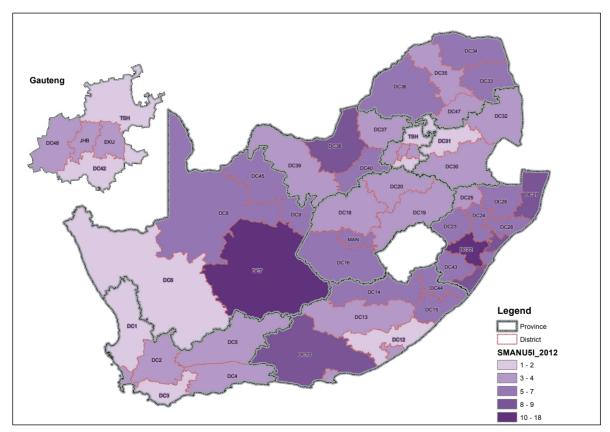
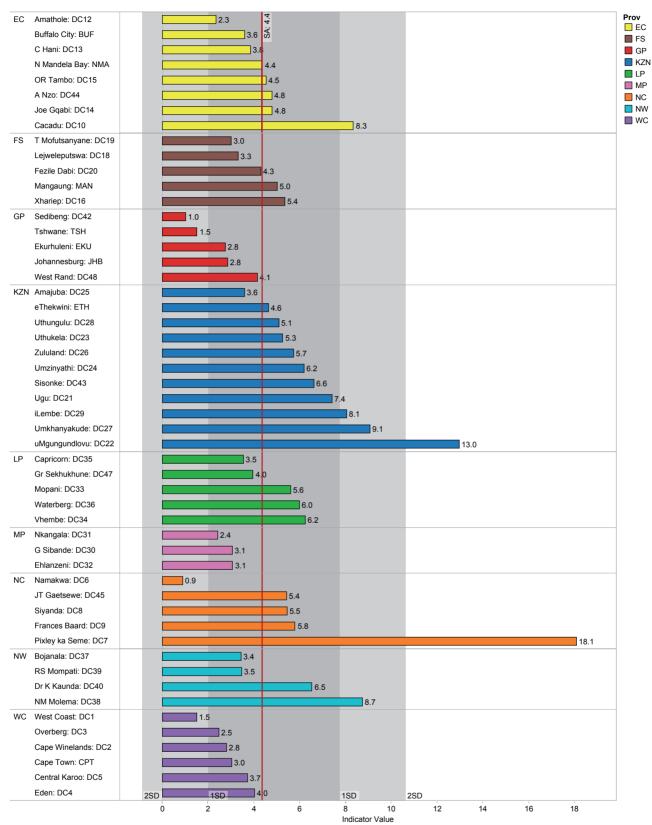


Figure 29: Child under 5 years severe acute malnutrition incidence (annualised) by NHI district, 2012/13

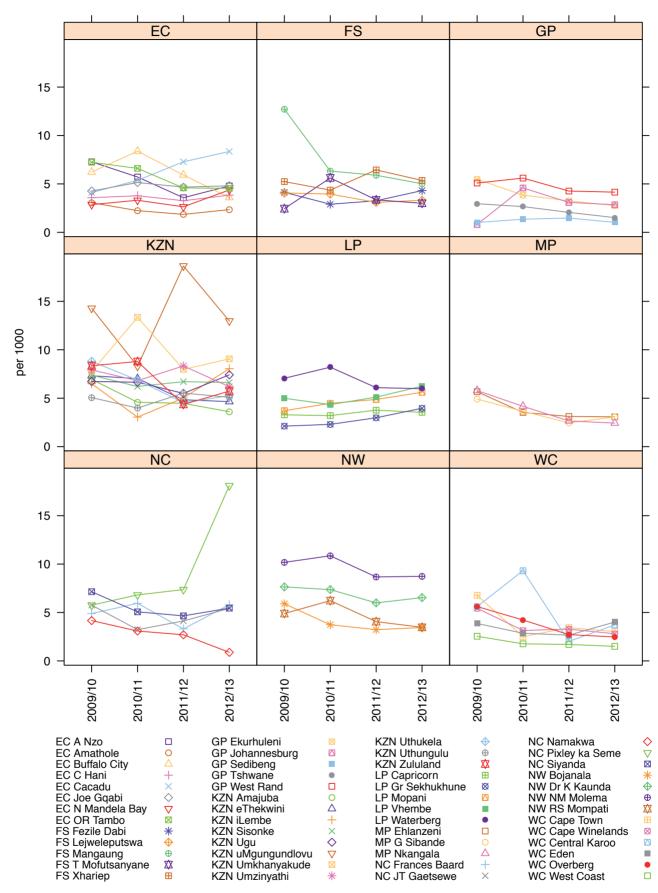
## Map 6: Child under 5 years severe acute malnutrition incidence (annualised) by district, 2012/13

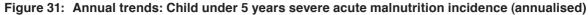


## Figure 30: Child under 5 years severe acute malnutrition incidence (annualised) by district, grouped by province, showing standard deviations from the average, 2012/13



Units: per 1000 Source: DHIS





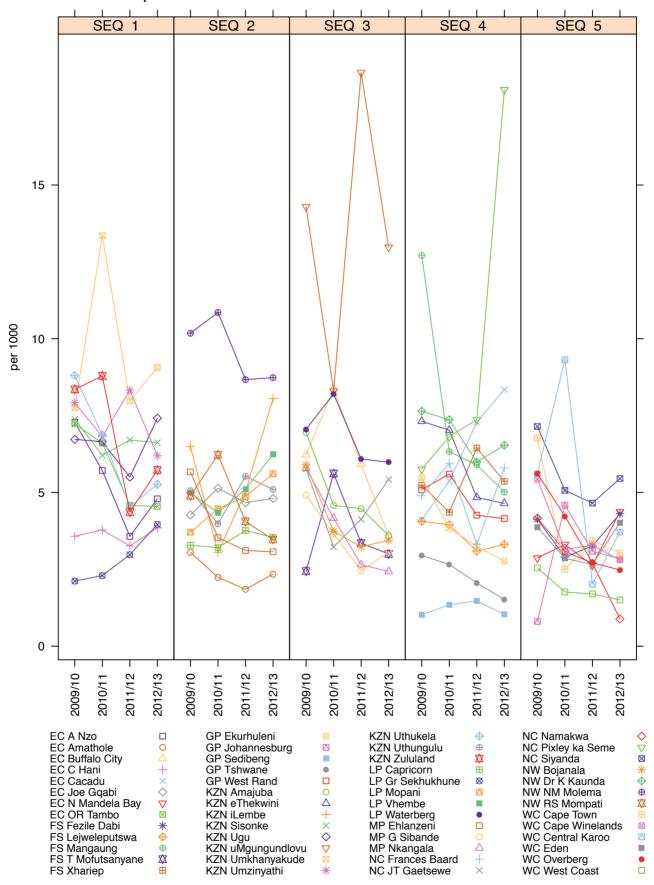


Figure 32: Annual trends: Child under 5 years severe acute malnutrition incidence (annualised) by socioeconomic quintile

## 7.7 Child under 5 years severe acute malnutrition case fatality rate

Death notification records indicate that malnutrition accounts for 4.2% of under-5 deaths in South Africa<sup>e</sup> and mortality audits of children dying in hospital estimate that it is a factor in many more deaths contributing indirectly as an underlying factor to 63.5% of under-5 deaths.<sup>1</sup> Severe acute malnutrition has therefore been included, together with diarrhoeal disease and pneumonia, in the mortality targeting programme recently introduced by the National Department of Health to improve the performance of health facilities. This programme requires that all facilities and districts achieve a prescribed reduction in the in-hospital mortality rate for severe acute malnutrition, calculated on a sliding scale based on the facility case fatality rate for the first half of 2012/13.

The child under 5 years severe acute malnutrition case fatality rate measures the proportion of all admissions of children under 5 years who died due to severe acute malnutrition. The proposed prescriptions for reduction in the death rate of children under 5 years of age admitted for severe acute malnutrition are:<sup>9</sup>

- All institutions with case fatality rates <10% must decrease their rate relative to the baseline by 5% for 2013/14
- All institutions with case fatality rates between 10 and 19.9% must decrease their rate relative to the baseline by 10% for 2013/14
- All institutions with a case fatality rate of >20% must decrease their rate relative to the baseline by 15% for 2013/14

The average case fatality rate for severe acute malnutrition in children under 5 years in South Africa for the 2012/13 period was 12.7%. This was down from the previous year's rate of 13.3%, which continued the descending trend from 19.3% in 2009/10.

The provincial figures for the 2012/13 period, excluding those for the Western Cape for which no data are available, ranged between 8.4% in the Northern Cape Province and 18.5% in Limpopo. The case fatality rate rose in two provinces and fell in six provinces. The greatest fall, from 28.9% to 8.4%, occurred in the Northern Cape over the four-year period from 2009/10.

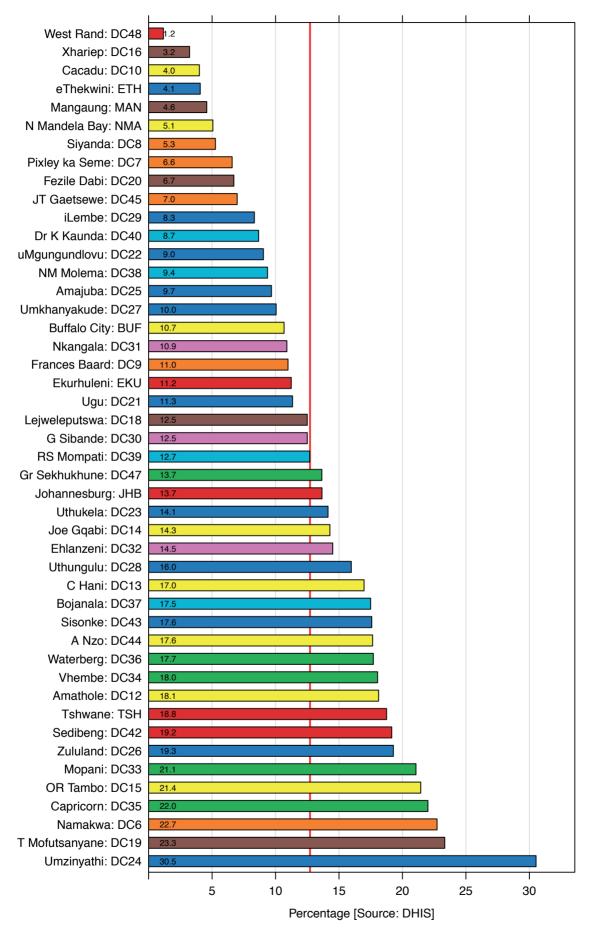
Figure 33 depicts the case fatality rate for severe acute malnutrition for 2012/13 in the eight provinces for which data are available. These ranged from 30.5% in Umzinyathi (KZN) to 1.2% in the West Rand (GP). Every district in Limpopo had a case fatality rate that was higher than the national average, as did five out of eight districts in the Eastern Cape, two out of four districts in the North West, and three out of five districts in Gauteng.

Seven of the 10 districts with the lowest case fatality rates had an incidence of severe acute malnutrition that was higher than the national average of 4.4 episodes per 1 000 children under 5 years. In contrast, the incidence of severe acute malnutrition among those districts with the higher case fatality rates included four of the five districts with the lowest incidence, as well as the district with the ninth-highest incidence in the country. It appears that the case fatality rate is inversely proportional to the incidence of severe acute malnutrition (Figure 37), but this could be due to data collection or reporting problems and requires further enquiry.

The case fatality rate among the NHI districts was slightly higher than that of the non-NHI districts. In the NHI districts, the rates ranged between 6.6% in Pixley ka Seme (NC) and 30.5% in Umzinyathi (KZN). There was an even split, with five NHI districts above the national average and five achieving a case fatality rate below this average.

The annual trends in the case fatality rates for severe acute malnutrition in children under 5 years by province and district are presented in Figure 36. This shows a sustained decline in case fatality rates in the Free State, a recent decline in Mpumalanga, and a reversal of falling rates in some North West districts. Whilst 32 districts experienced a decline in case fatality rates, there were 14 districts across all provinces, except Mpumalanga, where the rates increased. The greatest reduction occurred in Ehlanzeni (MP) where it fell 20.5 percentage points from 35.0% in 2011/12 to 14.5% in 2012/13. The largest increase was seen in Namakwa in the Northern Cape which experienced a 16.8 percentage point rise between 2011/12 and 2012/13.

#### Figure 33: Child under 5 years severe acute malnutrition case fatality rate by district, 2012/13



Provinces

EC FS GP

KZN

MP

NC NW

WC

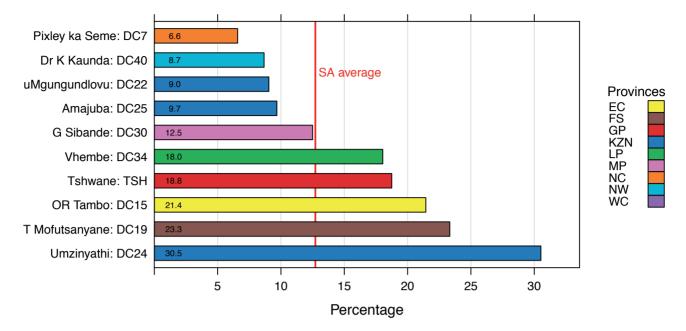


Figure 34: Child under 5 years severe acute malnutrition case fatality rate by NHI district, 2012/13

## Map 7: Child under 5 years severe acute malnutrition case fatality rate by district, 2012/13

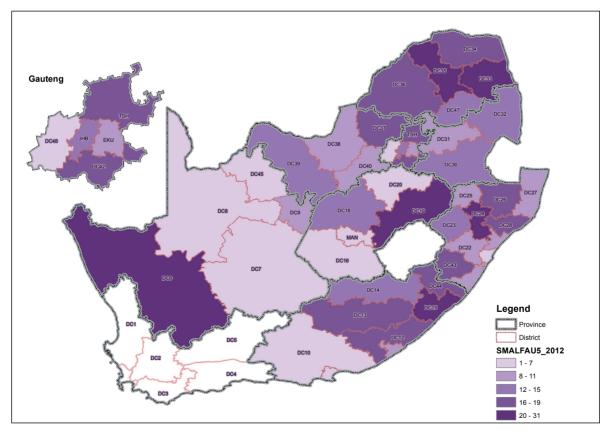
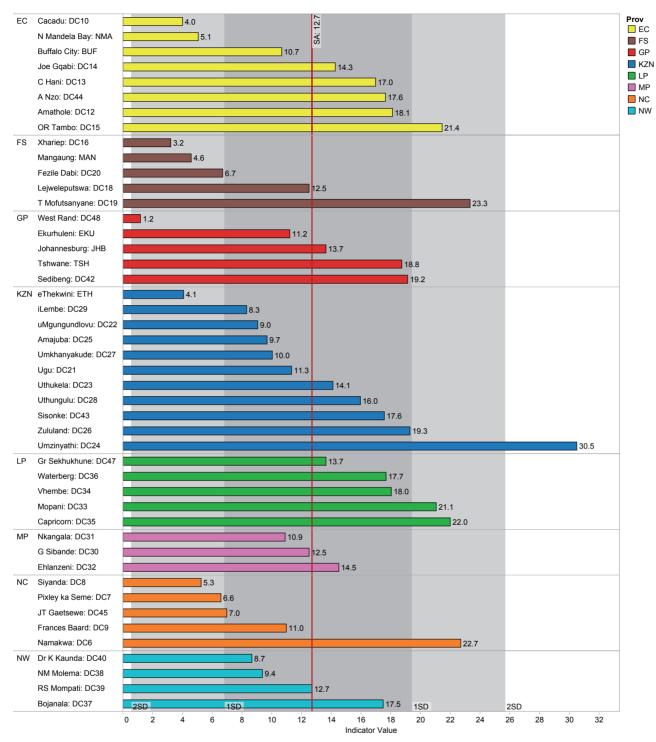


Figure 35: Child under 5 years severe acute malnutrition case fatality rate by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: DHIS

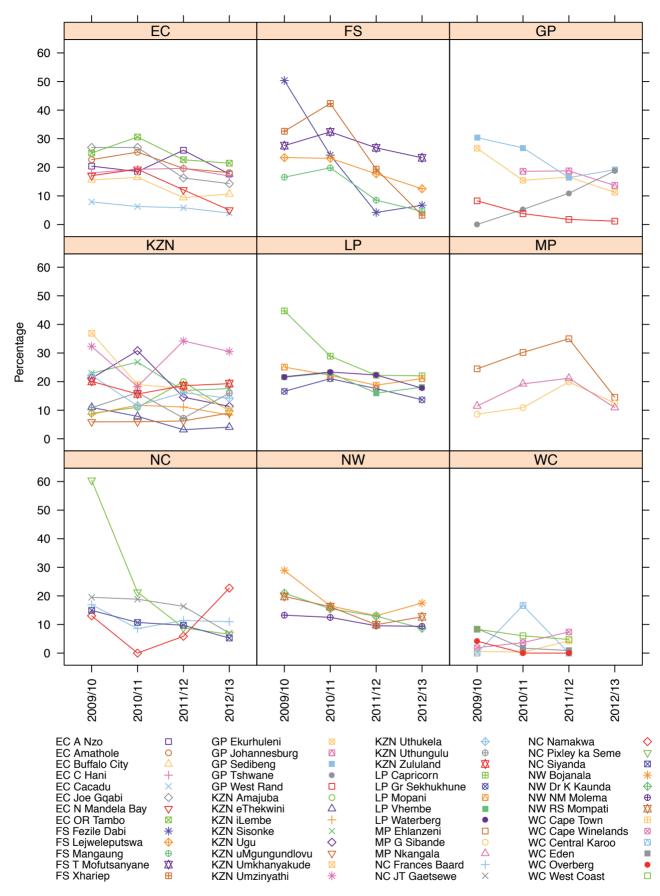
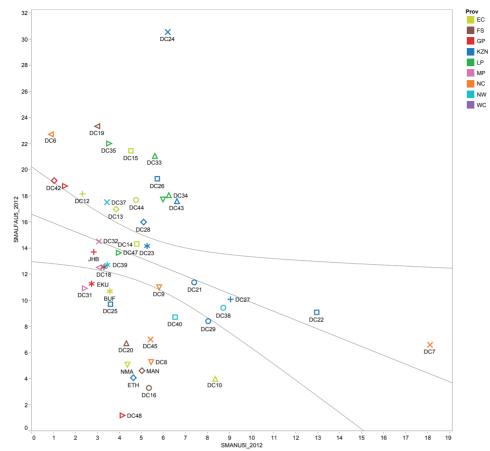
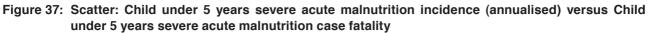


Figure 36: Annual trends: Child under 5 years severe acute malnutrition case fatality rate by district





## 8 Reproductive Health

## Nienke van Schaik

This chapter covers two aspects of reproductive health, namely the indicators 'couple year protection rate' and 'cervical screening coverage'.

Reproductive health is an essential part of our health services and if there is high coverage of good quality services, these can play a significant role in reducing the number of unwanted pregnancies, maternal morbidity and mortality, opportunities for mother-to-child transmission of HIV and preventable deaths due to cervical cancer.

## 8.1 Couple year protection rate

The couple year protection rate is an indicator that measures the proportion of women who are protected against pregnancy using modern contraceptive methods, including sterilisation. The numerator in this indicator is the 'Contraceptive years equivalent', which is the estimated protection provided by family planning services during a one-year period, based upon the volume of all contraceptives distributed to clients during that period. Each type of contraceptive method is adjusted by a conversion factor (country-specific)<sup>a</sup> to yield an estimate of the duration of contraceptive protection, made up as follows:

- Oral pill cycle ÷13 (one pack lasts 28 days = 13 per year)
- Medroxyprogesterone injection ÷ 4 (administered every three months)
- Norethisterone enanthate injection ÷ 6 (administered every two months)
- IUCD inserted \* 4 (estimated to provide effective contraception for four years)
- Male condoms distributed ÷ 200 (estimated number of times they are used per year)
- Male sterilisation \* 20 (estimated number of years of protection against pregnancy post-procedure based on median age at sterilisation)
- Female sterilisation \* 10 (estimated number of years of protection against pregnancy post-procedure based on median age at sterilisation)

The denominator is the 'Female Target population 15-44 years' where females are used as a proxy for couples.

Factors which impact on the couple year protection rate include inadequate or irregular access to contraceptive methods (including stock-outs that have been reported),<sup>b</sup> sectors of the population not accessing contraception for personal reasons such as religious or traditional values; lack of information and poor knowledge; and women trying to fall pregnant. A low couple year protection rate may mean that women are at risk of unintended pregnancy. Conversely, a high couple year protection rate may indicate that couples have adequate protection and are planning their pregnancies.

The new National Contraception and Fertility Planning Policy and Service Delivery guidelines<sup>c</sup> and the new National Contraception Clinical Guidelines<sup>d</sup> make way for additional modern contraceptive methods to be available to women in South Africa including implants, and additional types of intra-uterine copper devices (IUCDs).

The Health Minister, in his opening speech at the SA AIDS Conference, emphasised the need for women in South Africa to have dual protection against both HIV and pregnancy.<sup>e</sup> Furthermore, the concept of planning for pregnancy, especially among HIV-positive young women, and not merely preventing pregnancy, was highlighted.<sup>f</sup>

Overall, the couple year protection rate in South Africa has been low but has increased from 26.3% in 2002/03 to 37.8% in 2012/13.

The medroxyprogesterone injection, which is administered intramuscularly, is currently the contraceptive of choice for South African women as shown in Table 1, which has the values for selected data elements. Medroxyprogesterone and norethisterone injections combined contributed to about 47.0% of couple years of protection in 2012/13. Oral pill use continues to decline.

a http://www.cpc.unc.edu/measure/prh/rh\_indicators/specific/fp/cyp

b http://www.health-e.org.za/2013/04/25/clinics-without-family-planning-injections/

c http://www.doh.gov.za/docs/policy/2013/contraception\_fertility\_planning.pdf

d http://www.doh.gov.za/docs/policy/2013/Contraception\_Clinical\_Guidelines\_28jan2013-2.pdf

e Opening Speech by the Minister of Health, Dr Aaron Motsoaledi, the South African AIDS Conference, Durban, 18 June 2013 (http://www.doh.gov.za/ show.php?id=4305)

f Green A. Life-saving cancer vaccine will be difficult to implement. Mail & Guardian [online]. 7 June 2013 Jun 7 [cited 15 August 2013]; Available from: http://mg.co.za/article/2013-06-07-life-saving-cancer-vaccine-will-be-difficult-to-implement

Table 1:	Analysis of selected aspects of access to	o contraception in the country, 2008/09 – 2012/13

	2008/09	2009/10	2010/11	2011/12	2012/13
Couple year protection rate	30.9	31.9	31.6	32.7	37.8
Contraceptive method					
IUCD inserted	3 449*	4 516**	8 499	10 139	18 141
Medroxyprogesterone injection	5 185 229	5 378 263	5 314 910	5 567 473	5 642 204
Norethisterone enanthate injection	4 430 186	4 438 638	4 195 547	4 280 071	4 265 963
Oral pill cycle	5 128 249	4 972 533	4 497 036	4 369 965	4 249 143
Male condoms distributed	46 443 148	221 494 728	251 288 124	273 354 013	387 576 754
Sterilisation male	2 319*	1 224	1 431	906	863
Sterilisation female	19 937	22 572	17 371 ***	19 446***	28 279

(\*NW data missing; \*\*LP data missing; \*\*\*WC data missing)

After being fairly static for a number of years, the couple year protection rate increased in all provinces from 2011/12 to 2012/13. The greatest increases were seen in the Western Cape, where the rate increased by 11.9 percentage points to 70.2%, and in KwaZulu-Natal, where it increased by 10.4 percentage points to 37.5%. The increase in the Eastern Cape was negligible from 31.2% to 31.3%. Gauteng is now the poorest-performing province, with the couple year protection rate at 28.3%. The Western Cape couple year protection rate is 1.7-fold higher than the next highest province, which is Limpopo.

The variation in the couple year protection rate across the districts for 2012/13 is shown in Figure 1, with the profile for NHI districts being shown in Figure 2 and the annual trends being shown in Figure 3.

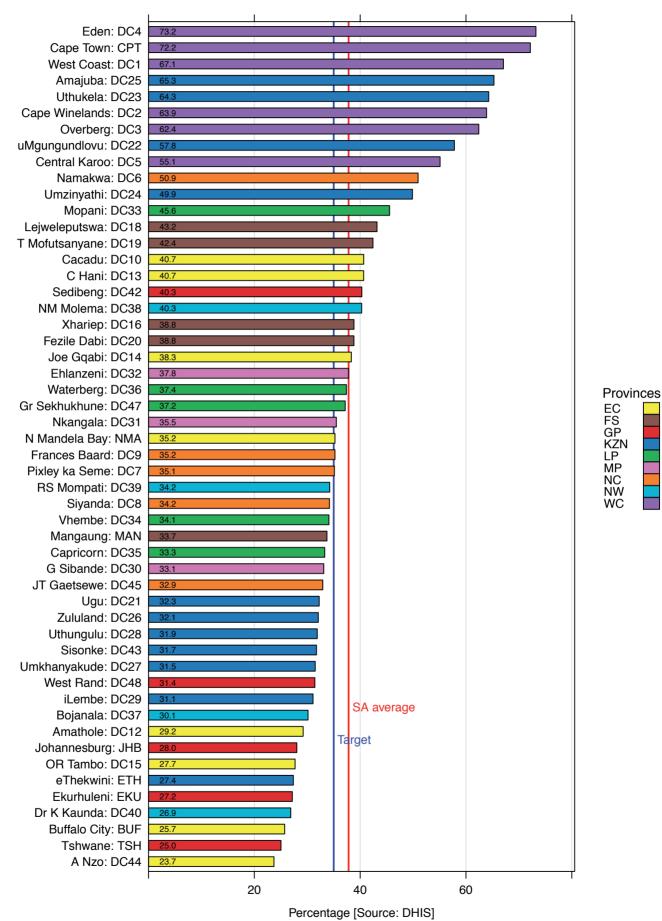
The Western Cape is the best-performing province, with all six districts in the top nine districts nationally. The rates in other provinces continue to increase on an annual basis. Uthukela (KZN), Amajuba (KZN), uMgungundlovu (KZN) and Ngaka Modiri Molema (NW) districts all had substantial increases, ranging from 17.9 percentage points to 39.1 percentage points in the past year.<sup>9</sup> Where decreases occurred, these were small, with the largest drop being in Nelson Mandela Bay which decreased from 37.2% to 35.2%. Alfred Nzo was the poorest-performing district with a couple year protection rate of 23.7%. Map 1 illustrates the low rates in the eastern part of the Eastern Cape.

The performance in the NHI districts is highly variable, ranging from the top-performing district, Eden (WC), at 73.2% to the second poorest-performing district, Tshwane (GP), at 25.0%.

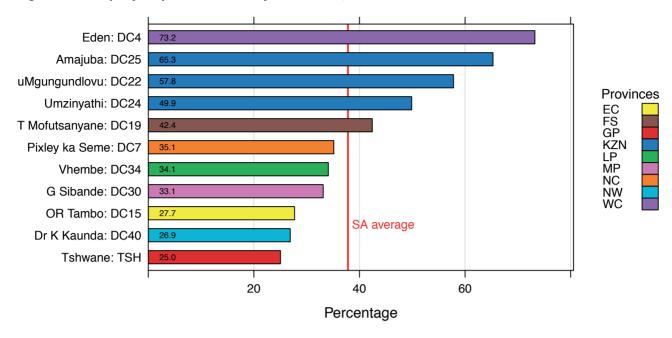
In four of the five districts with the highest population of females aged 15-44 years, the couple year protection rate is low. In Johannesburg (GP), eThekwini (KZN), Ekurhuleni (GP) and Tshwane (GP) the rates are well below the national average. Tshwane (GP) has dropped to being the second poorest-performing district overall. Cape Town (WC) is the only metro with a rate above the national average.

Districts in socio-economic quintile 5 (wealthiest) have the highest contraceptive coverage rates and quintile 1 (poorest) the lowest.

g In most of the districts where there has been a strong increase in the couple year protection rate, this appears to have been linked primarily to concomitant increases in condom distribution rather than increases in all contraceptive methods. The increases in condom distribution in KZN appear to be mostly the addition of new non-profit non-medical site reporting units such as Condom Distribution Non-medical Site (Newcastle) and Emnambithi Grey Areas Data. This may represent increased distribution or it may simply be first-time reporting on existing distribution practices, since there has been a large deficit noted in previous years between the total condom distribution reported by DHIS compared to the figures reported by the National Department of Health based on procurement. The increase in NM Molema District, on the other hand, is more generalised across all reporting units.

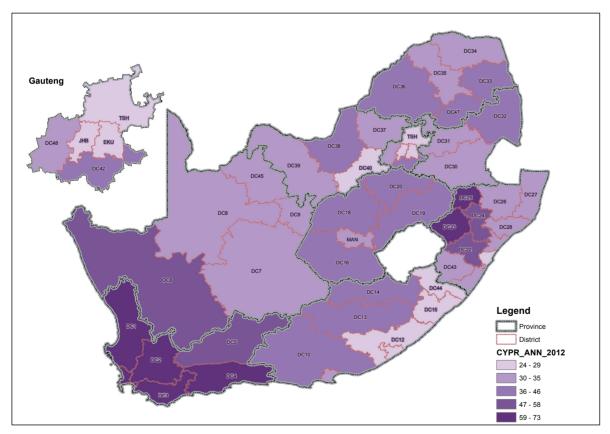


#### Figure 1: Couple year protection rate by district, 2012/13

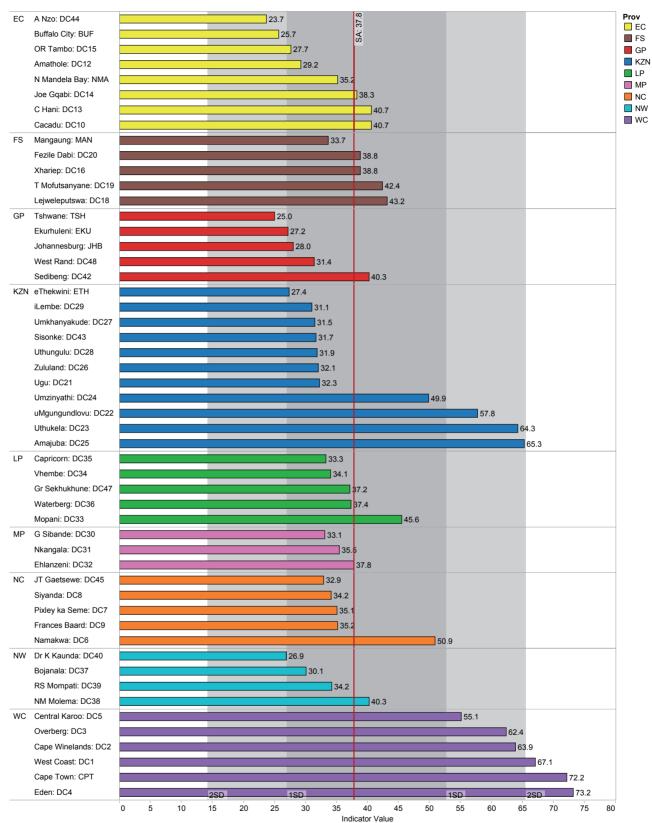




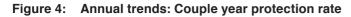
Map 1: Couple year protection rate by district, 2012/13

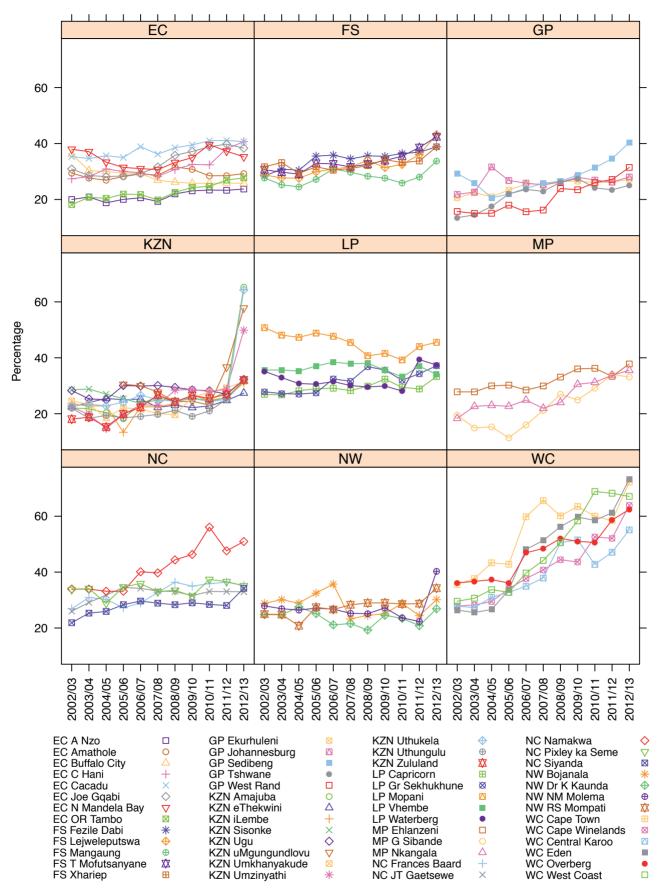


# Figure 3: Couple year protection rate by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage Source: DHIS





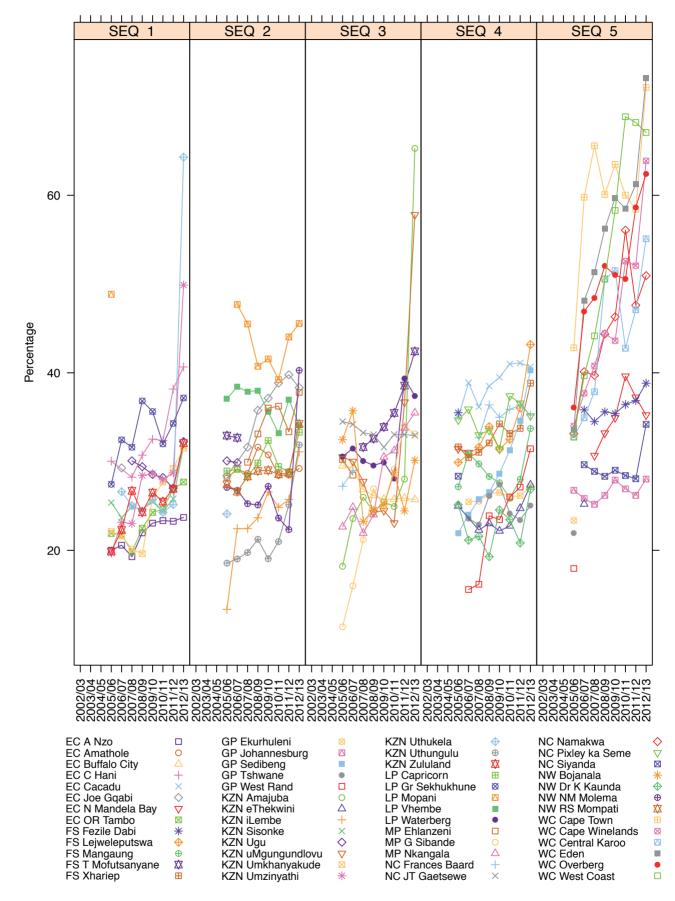


Figure 5: Annual trends: Couple year protection rate by socio-economic quintile

#### 8.2 Cervical cancer screening coverage

Cervical cancer is the second most commonly occurring cancer in women in South Africa after breast cancer.<sup>h</sup> The agestandardised incidence rate is 26.6 per 100 000 women compared to 15.3 world-wide.<sup>h</sup>

The 2000 National Department of Health (NDoH)<sup>i</sup> guidelines for the national cervical cancer screening programme in South Africa state that all asymptomatic women 30 years of age or older should be offered three free PAP smears, with 10-year intervals between smears. Women screened for the first time at age 55 or older will have only one more smear if the first smear was normal. The aim was to screen at least 70% of women in South Africa within the target age group in 10 years. This was expected to reduce the cumulative incidence of cervical cancer by 64.0%.

This indicator's numerator is the number of cervical smears done for screening (not diagnostic) purposes in woman 30 years and older. The denominator is 10 percent of the female target population 30 years and older. Screening coverage of 100% per year means that every woman in the eligible age group is screened once in 10 years.

New national management guidelines were introduced in 2010 for HIV-positive women<sup>j</sup> and these stated that a cervical smear must be taken at diagnosis of HIV positivity and, if normal, be repeated every three years, irrespective of antiretroviral treatment (ART) status. Women with abnormal smears require a repeat smear within a year if no other intervention is indicated. Despite this policy change in 2010, there has been no rapid increase in the number of cervical smears performed. As this, like all DHIS indicators, is a quantitative indicator, further investigations and research are required to measure the quality of the screening programme such as smear adequacy, follow-up smears after abnormal smears, and colposcopy referral and attendance.

A positive step in the prevention of cervical cancer is that in May 2013, the Minister of Health announced the introduction of cervical cancer vaccines to 9- and 10-year-old girls as from February 2014. This will take place in the poorest 80% of schools.<sup>f</sup>

Overall, the cervical screening rate in South Africa in 2012/13 was 55.4%, a marginal increase from 55.0% in 2011/12. This exceeds the NDoH target for cervical cancer screening coverage of 54.0%, as shown in the NDoH Annual Performance Plan for 2012/13.

The increase in cervical screening coverage in KwaZulu-Natal over the past few years has continued to improve from 77.1% in 2011/12 to 81.8% in 2012/13. KZN remains the best-performing province. The Free State showed a substantial increase from 44.2% to 51.0%. The Eastern Cape showed a marginal increase (from 37.8% to 38.8%) as did the North West (from 48.8% to 49.0%). The rate has declined over the past two financial years since 2010/11 in Gauteng, Mpumalanga, Northern Cape and the Western Cape.

At a district level, Umzinyathi (KZN) had the highest cervical screening coverage in 2012/13 at 140.2%. This coverage has been over 100% since 2009/10. The high rates may be due to PAP smears being done according to the guidelines for HIV-positive women.

Although the 10 districts with the highest coverage include several districts that also have the highest antenatal HIV prevalence (Ugu, uMgungundlovu, Umkhanyakude, eThekwini, Zululand, and Sisonke – all in KZN), the list also contains Umzinyathi (KZN) and RS Mompati (NW) that have a fairly average HIV prevalence, and Eden (WC) and Central Karoo (WC) that have low antenatal HIV prevalence rates. For the latter districts, it is likely that the high coverage rates reflect a high uptake of cervical smears in all women, regardless of HIV status.

The most improved district in terms of the cervical screening rate over the past year was Ugu (KZN) (from 71.9% to 95.3%). The rate dropped most in iLembe (KZN) (from 90.5% to 69.6%) during the past year. The poorest-performing district was JT Gaetsewe (NC) where the rate was 23.5%.

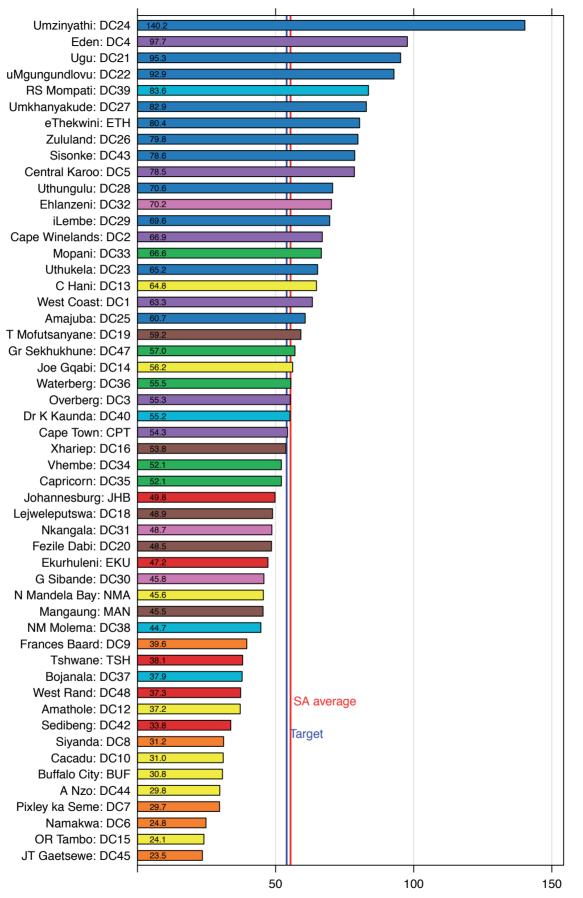
There was considerable variation in the NHI districts, as this profile included the best-performing district, Umzinyathi (KZN), as well as OR Tambo (EC) which was the second lowest district overall.

The variation in the 2012/13 cervical screening rates across the districts is shown in Figure 6 and Map 2, with the rate across NHI districts shown in Figure 7 and the annual trends shown in Figure 9.

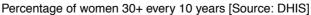
h WHO/ICO Information Centre on HPV and Cervical Cancer (HPV Information Centre). Human Papillomavirus and Related Cancers in South Africa. Summary Report 2010. c2010 [cited 2013 July 05]; Available from: http://www.hpvcentre.net/statistics/reports/ZAF.pdf

i National Department of Health. National Guideline for Cervical Screening Programme. Pretoria: National Department of Health Republic of South Africa; 2002.

j National Department of Health. Clinical Guidelines for the management of HIV/AIDS in adults and adolescents. Pretoria: National Department of Health Republic of South Africa; c2010 [cited 2013 July 05]; Available from: http://www.sahivsoc.org/upload/documents/Clinical\_Guidelines\_for\_the\_Management\_of\_HIV\_AIDS\_in\_Adults\_Adolescents\_2010.pdf



#### Figure 6: Cervical cancer screening coverage by district, 2012/13



Provinces

EC FS GP

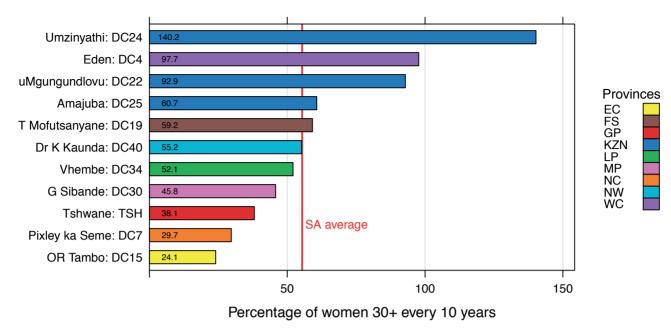
KZN LP

MP

NC

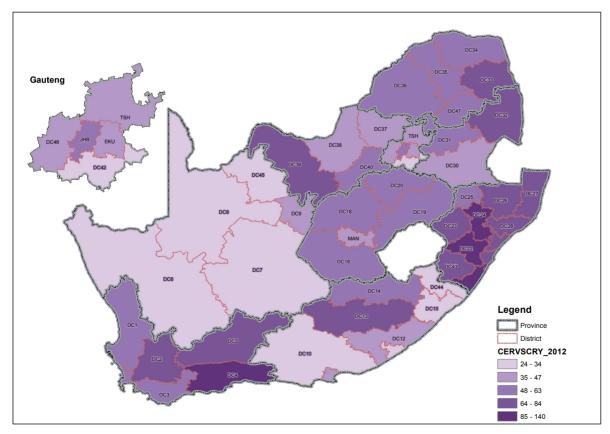
NW

WC

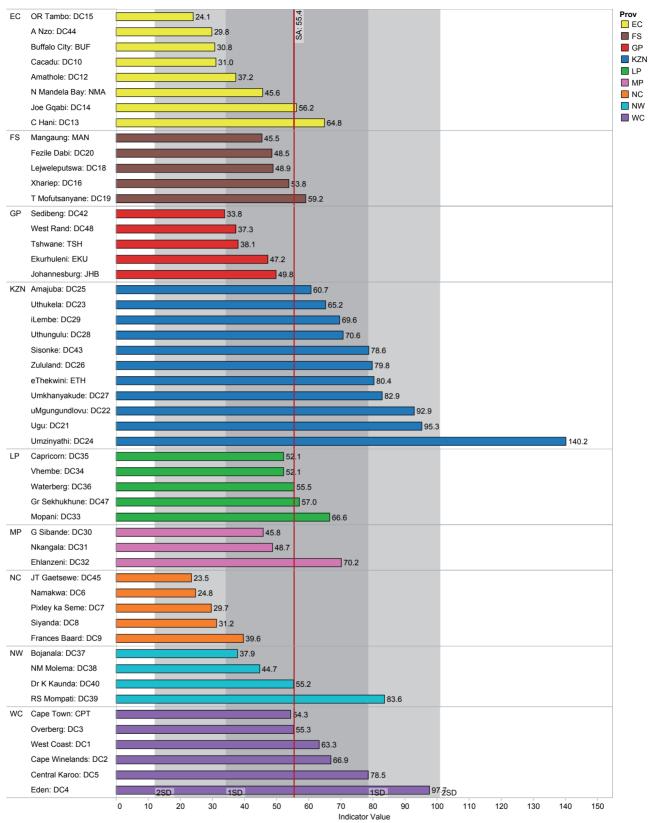


#### Figure 7: Cervical cancer screening coverage by NHI district, 2012/13

Map 2: Cervical cancer screening coverage by district, 2012/13

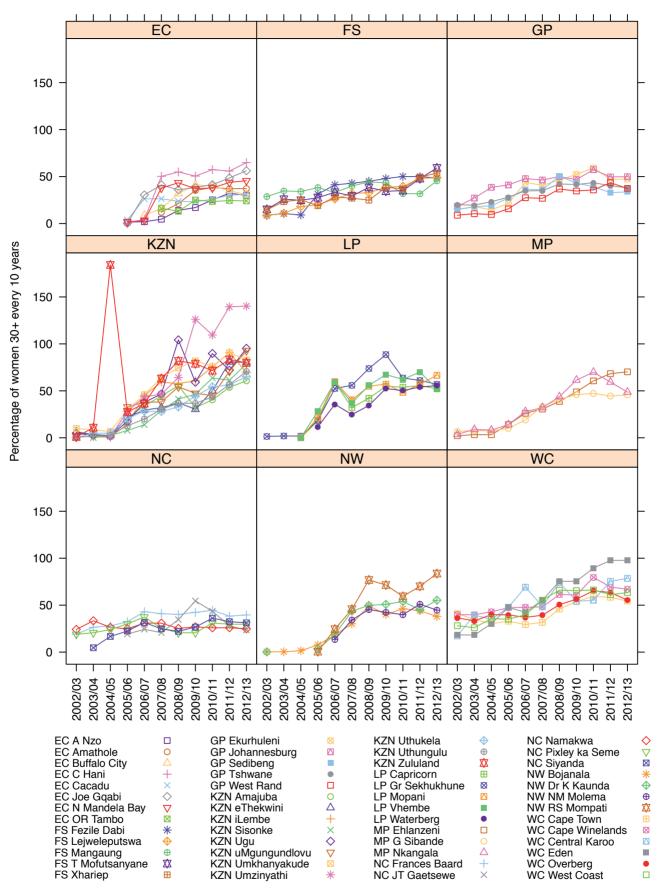


## Figure 8: Cervical cancer screening coverage by district, grouped by province, showing standard deviations from the average, 2012/13



Units: Percentage of women 30+ every 10 years Source: DHIS





## 9 **Tuberculosis**

## **Marian Loveday**

South Africa, with the twin epidemics of tuberculosis (TB) and HIV, has the highest incidence of TB in the world (993 per 100 000 people) and one of the largest drug-resistant TB epidemics globally. Many patients with TB are co-infected with HIV.<sup>a</sup> TB is the primary cause of mortality in South Africa.<sup>b</sup>

In 2011, the National Department of Health introduced a new diagnostic tool – the GeneXpert,<sup>c</sup> which is an automated diagnostic test that can identify TB and mycobacterial resistance to rifampicin. This test produces results much faster than conventional laboratory methods. Since 2011, GeneXpert machines have been installed in all districts and diagnostic algorithms have been changed.

## 9.1 TB case finding

During 2012, a total of 349 594 cases of TB (all types) were recorded in the electronic TB register (ETR.Net). Of these, 119 901 were classified as new pulmonary TB smear-positive. There was a significant drop in the numbers reported compared to 2011 when 130 826 new pulmonary TB smear-positive cases were reported. There has been a trend of decreasing numbers since the peak of 135 978 cases in 2009.

The number of cases of new pulmonary smear-positive TB per district diagnosed in 2012 varied considerably. This is expected because of the wide variation in the population sizes of the districts. eThekwini (KZN) reported the most cases (12 047) followed by the cities of Cape Town (WC) and Johannesburg (GP) with 7 644 and 7 137 cases respectively. The lowest numbers of cases were reported by the Central Karoo (WC) and Namakwa (NC) with 242 and 322 cases respectively, both of which have very small populations scattered over wide geographical areas.

### 9.2 TB case finding index

The TB case finding index has been included in this year's Barometer for the first time in an attempt to provide some indication as to whether enough people are being investigated for possible TB. This indicator is defined as the proportion of clinic attendees over five years old who were suspected of having TB, and had sputum taken and sent for testing for TB.

The average case finding index for South Africa is 2.4%, varying from a high of 3.6% in the Eastern Cape (EC) to lows of 1.9% in Limpopo (LP) and 1.7% in Mpumalanga (MP) and the Western Cape. In Figure 1, the variation in case finding index by district is illustrated. Three Eastern Cape districts have case finding rates of close to 5% – Alfred Nzo (4.9%), Chris Hani (4.8%) and Joe Gqabi (4.3%). The lowest case finding rate of 1.5% was recorded in Mopani (LP).

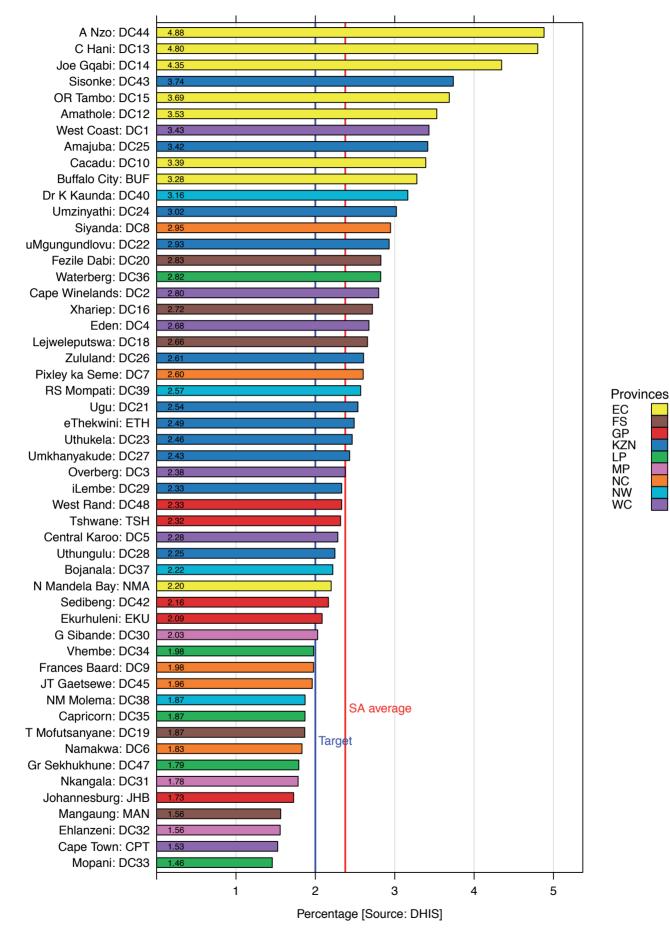
### 9.3 Incidence of TB

The incidence of TB is a measure of the number of people who develop TB (in this case, those who are diagnosed; new cases) within a specific period of time. In South Africa in 2012, the incidence rate (all TB) was 687.3 per 100 000 people. Although this was lower than the incidence in 2011, it still represents the highest TB incidence rate in the world.<sup>a</sup> Figure 5 and Map 2 show the incidence rates of all types of TB in each district in 2012. Six of the 13 districts with the highest TB incidence rates are in KwaZulu-Natal.

a World Health Organization. Global Tuberculosis Report 2012. WHO/HTM/TB/2012.6. Geneva: World Health Organization; 2012.

b Statistics South Africa. Mortality and causes of death in South Africa, 2010: Findings from death notification. Pretoria: Stats SA; 2013.

c Xpert<sup>®</sup> MTB/RIF, Cepheid, Sunnyvale, CA, USA.



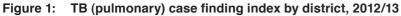
KZN

LP MP

NC

NW

WC



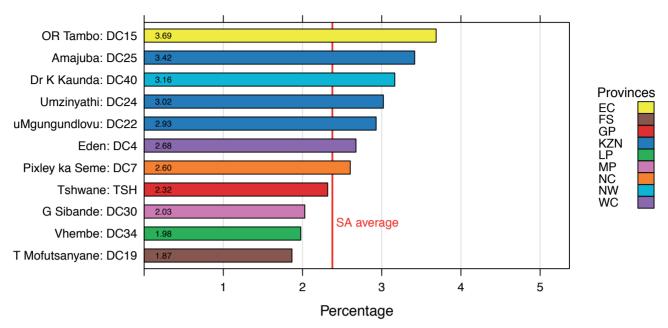
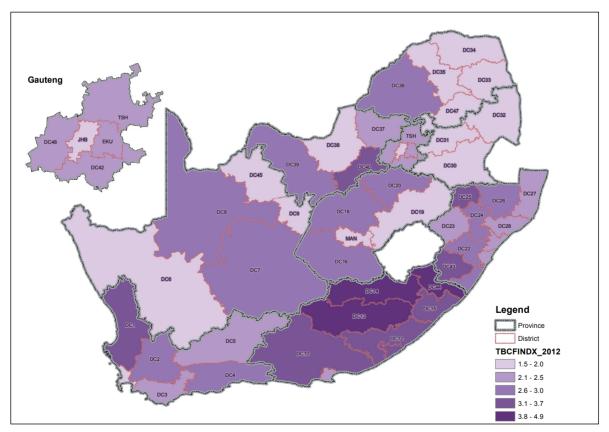
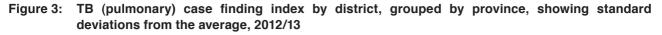
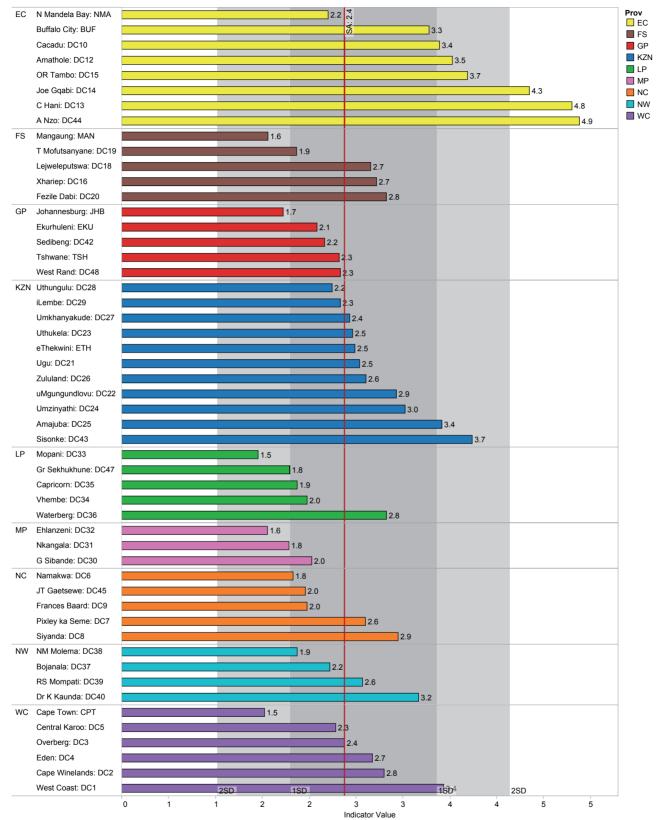


Figure 2: TB (pulmonary) case finding index by NHI district, 2012/13

#### Map 1: TB (pulmonary) case finding index by district, 2012/13







Units: Percentage Source: DHIS

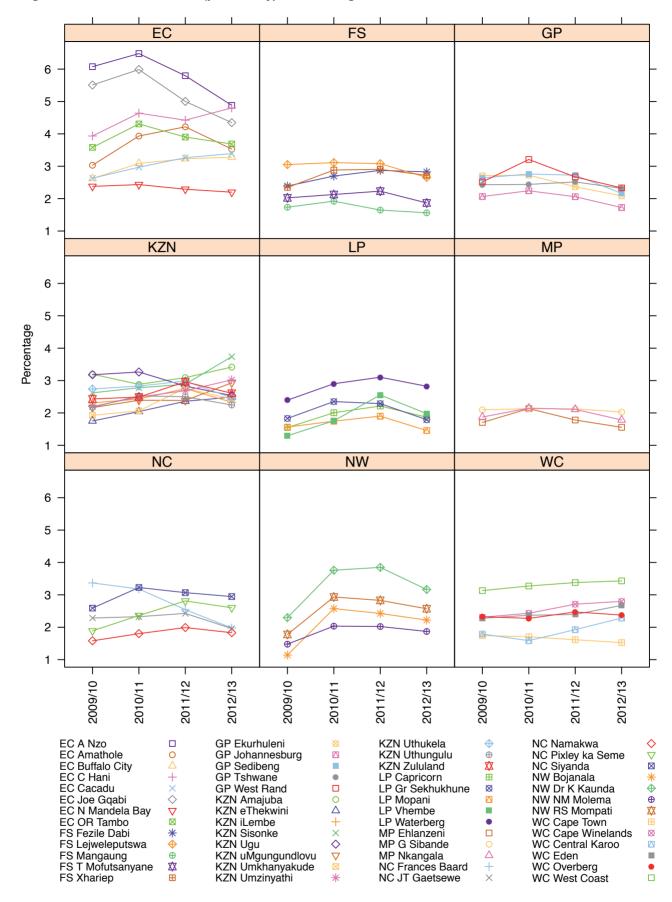
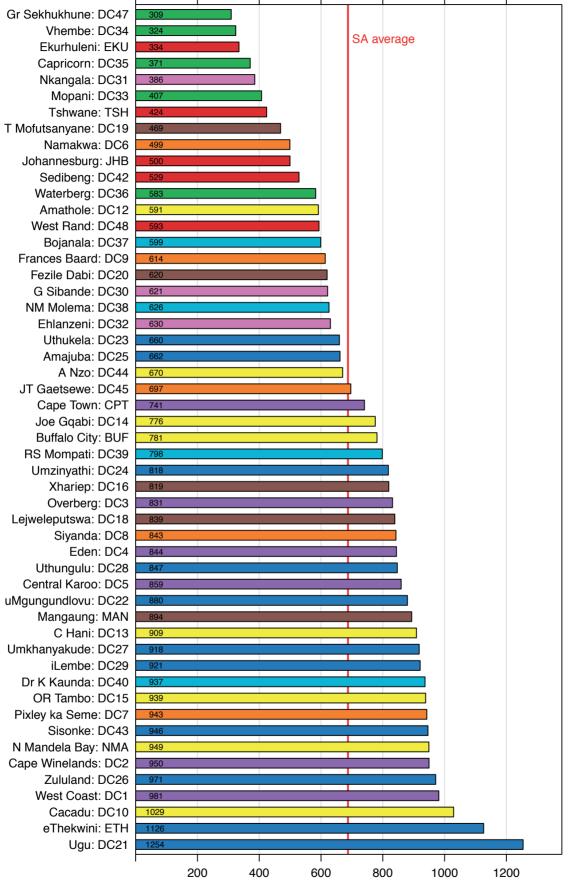


Figure 4: Annual trends: TB (pulmonary) case finding index



Provinces

EC FS GP

KZN

MP

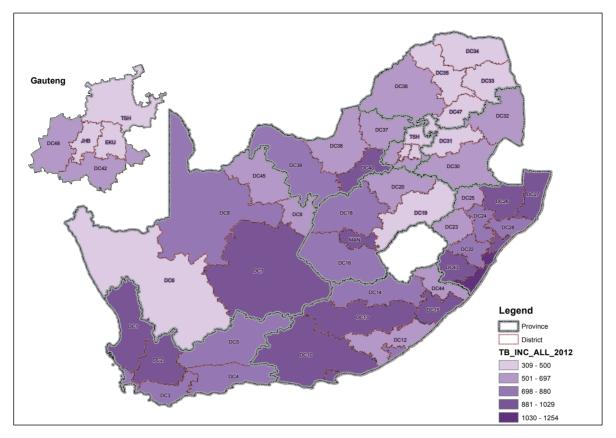
NC

NW

WC

#### Figure 5: Incidence (diagnosed cases) of TB – all types by district, 2012





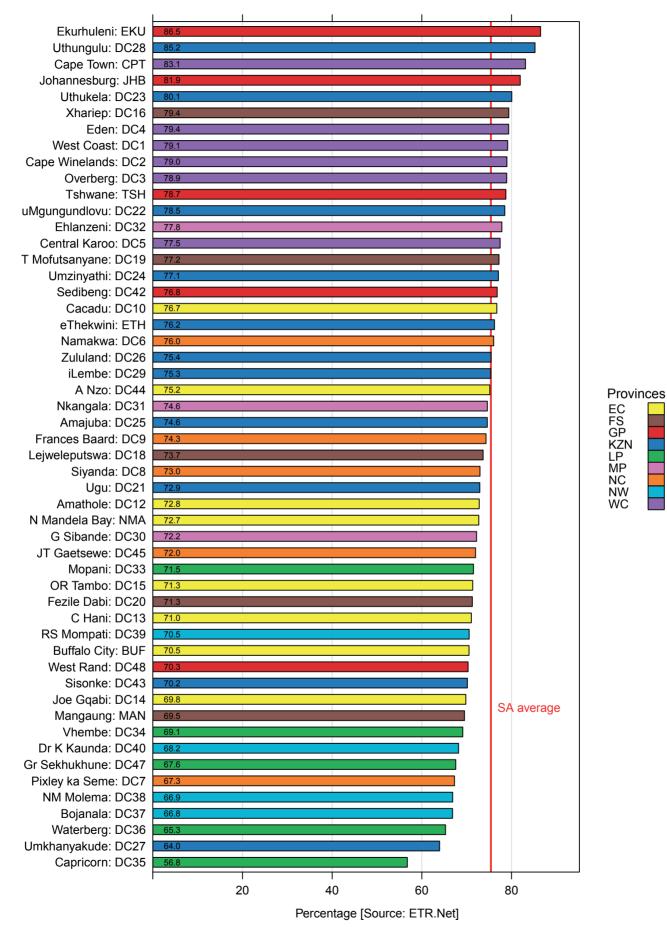
Map 2: Incidence (diagnosed cases) of TB – all types by district, 2012

## 9.4 TB successful treatment rate (all TB)

Treatment success is the sum of the patients who were either cured of TB or completed their TB treatment. Patients who completed treatment are defined as having completed the full course of treatment without bacteriological proof of cure, whilst patients who are cured have completed the course of treatment with bacteriological proof of cure, namely a sputum-negative test result at the end of treatment.

The average TB successful treatment rate (all TB) for the country has steadily improved from 68.8% in 2007 to 75.4% in 2011. At a provincial level, the treatment success varied from highs of 81.5% in the Western Cape and 80.7% in Gauteng to lows of 65.7% in Limpopo and 67.8% in the North West. Figure 6 illustrates the variation in treatment success across the districts, ranging from a high of 86.5% in Ekurhuleni (GP) to a low of 56.8% in Capricorn (LP).

Figure 18 is very helpful in interpreting the reasons for low success rates. Capricorn (LP) can be seen to have a low treatment success rate as a consequence of a combination of a high death rate (14.6%) and 21.8% of the patients being transferred out. In contrast, the low treatment success rate in Umkhanyakude can be seen to be a consequence of a high lost-to-follow-up (LTFU) rate of 16.4%, a high death rate (8.2%) and a transfer-out rate of 5.1%. Waterberg (LP) has the third lowest treatment success rate (65.3%) as a consequence of a high death rate (11.9%) and high transfer-out rate (13.4%).



#### Figure 6: TB successful treatment rate (all TB) by district, 2011

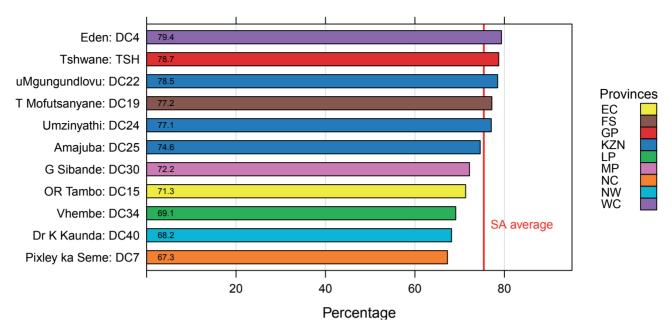
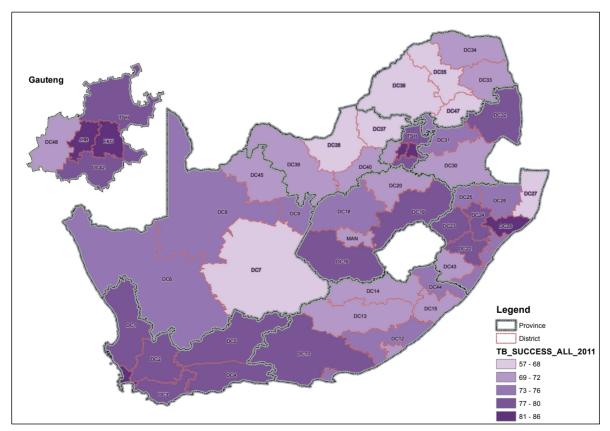


Figure 7: TB successful treatment rate (all TB) by NHI district, 2011

#### Map 3: TB successful treatment rate (all TB) by district, 2011



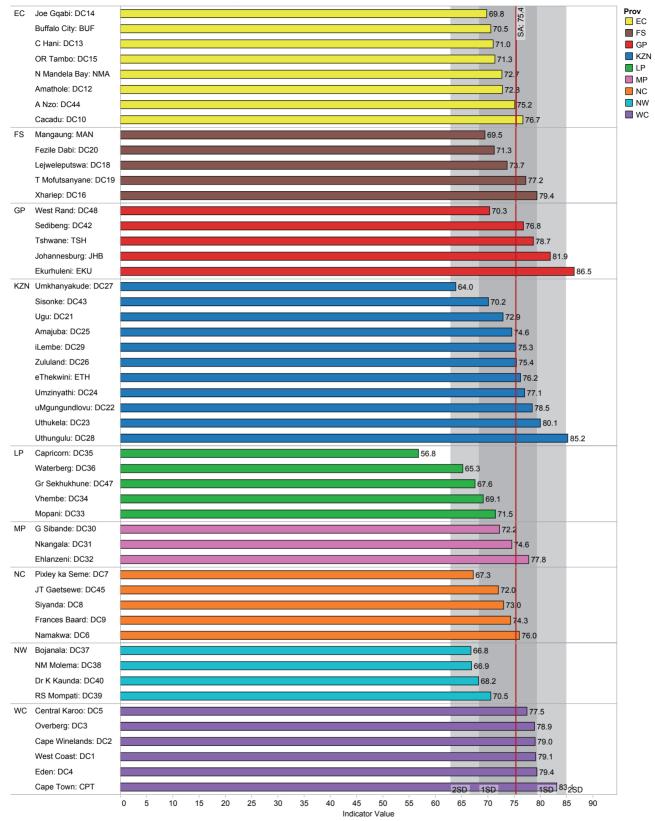


Figure 8: TB successful treatment rate (all TB) by district, grouped by province, showing standard deviations from the average, 2012/13

Units: Percentage Source: ETR.Net

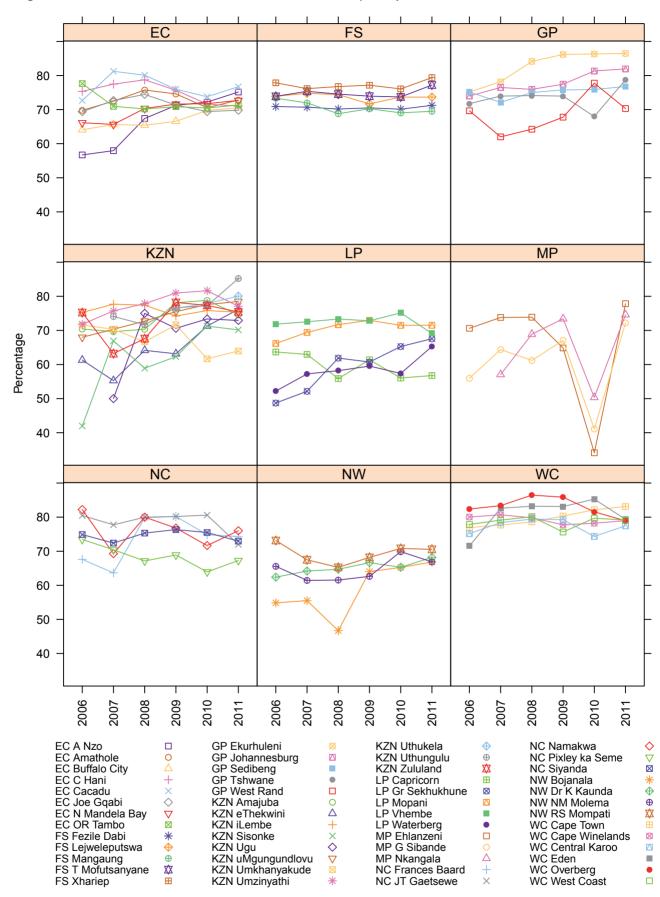
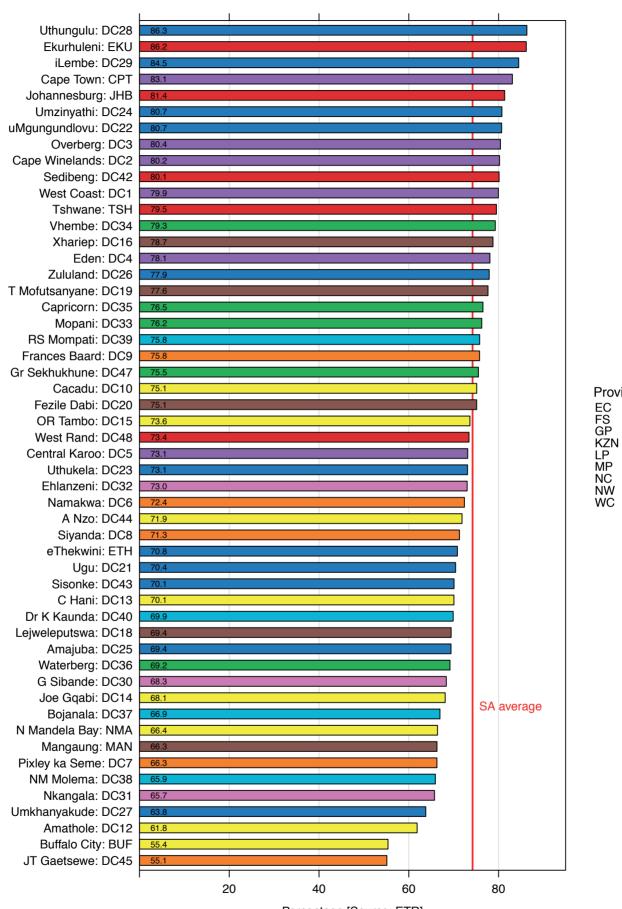


Figure 9: Annual trends: TB successful treatment rate (all TB)

### 9.5 TB cure rate (new pulmonary smear-positive)

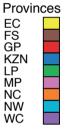
The cure rate for new pulmonary smear-positive (sm+) TB patients has increased over the last six years from 61.6% in 2006 to 74.2% in 2011. Although this increase is encouraging and the upward trend in cure rate continues, greater improvements are needed annually for South Africa to halt the TB epidemic and reach the World Health Organization (WHO) cure rate target of 85%. The cure rate in all provinces improved over the last year, except in the Northern Cape where the rate dropped from 70.7% in 2010 to 68.3% in 2011.

At a district level, the cure rates varied considerably (Figure 10). Two districts, Uthungulu (KZN) and Ekurhuleni (GP), achieved the WHO target with cure rates of 86.3% and 86.2% respectively. It is encouraging that an additional eight districts had cure rates over 80%. In contrast, two districts had cure rates of less than 60%. JT Gaetsewe (NC) had a cure rate of 55.1% and Buffalo City (EC) had a rate of 55.4%. Most districts either improved or at least maintained their cure rates between 2010 and 2011. However, there were four districts in which cure rates declined substantially over the two-year period: JT Gaetsewe (NC) declined from 70% to 55.1%; West Rand (GP) declined from 83.7% to 73.4%; Amajuba (KZN) cure rate decreased from 79.7% to 69.4%, and Eden (WC) from 85.1% to 78.1%.



#### Figure 10: TB cure rate (new sm+) by district, 2011





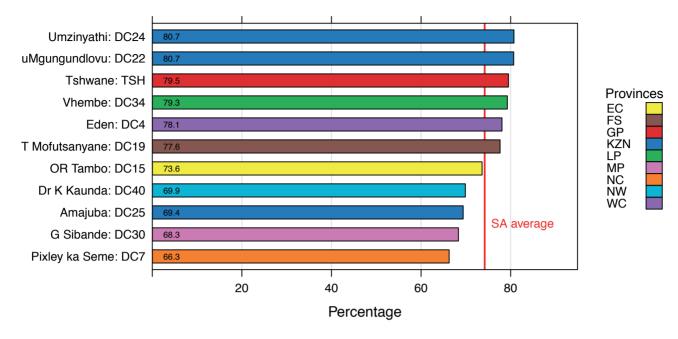
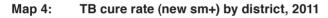


Figure 11: TB cure rate (new sm+) by NHI district, 2011



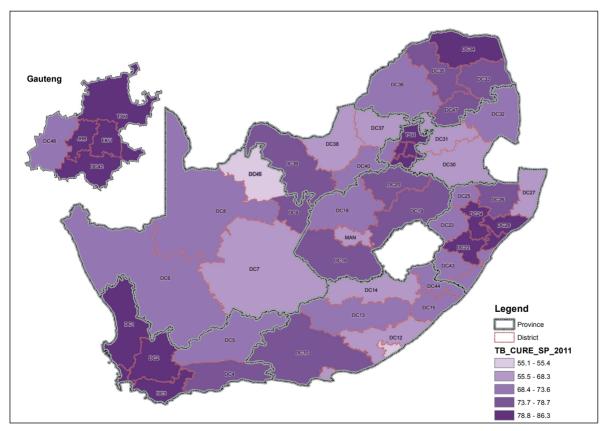
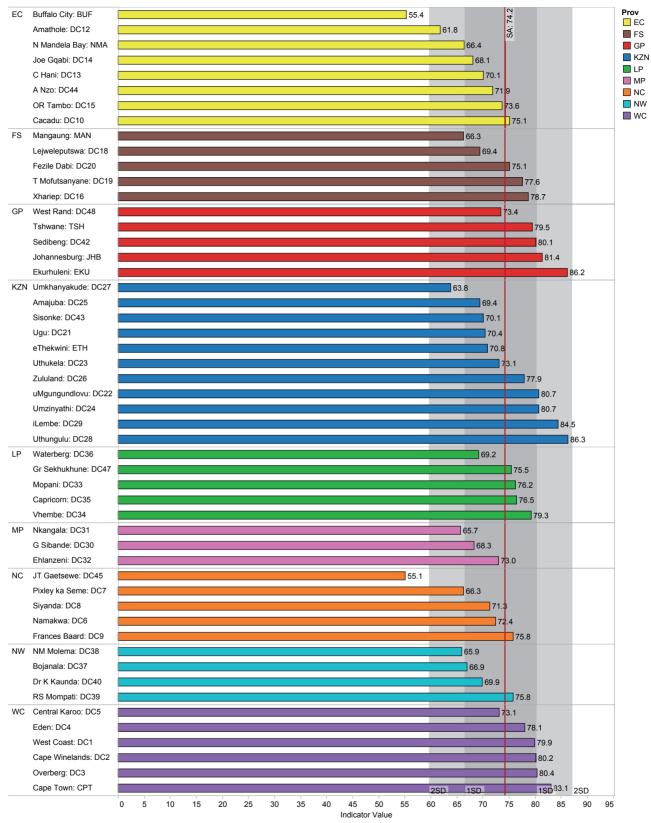
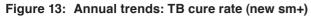
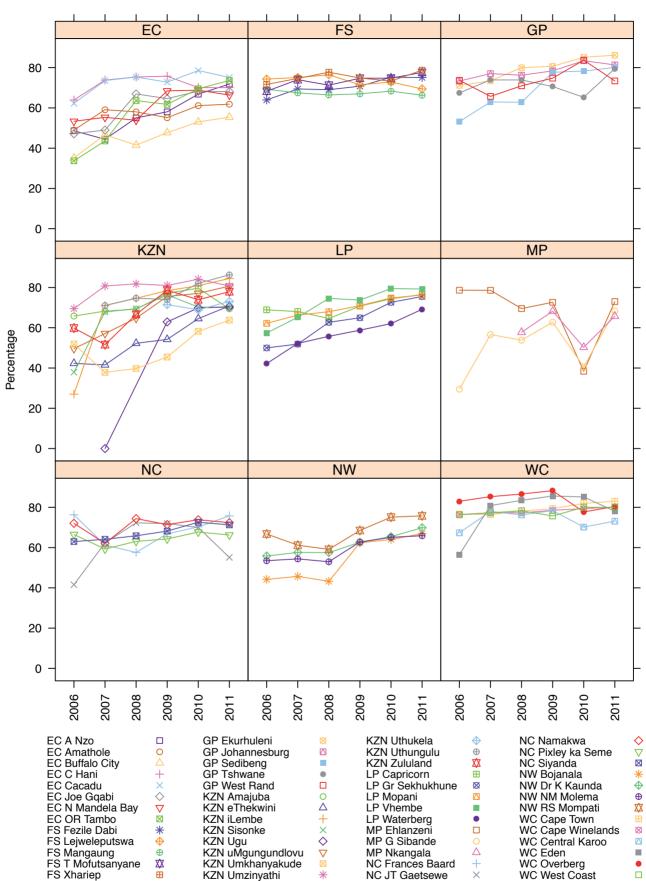


Figure 12: TB cure rate (new sm+) by district,	grouped by province, showing standard deviations from the
average, 2012/13	



Units: Percentage Source: ETR





#### 9.6 TB defaulter rate (new pulmonary smear-positive)

This indicator measures the proportion of patients with new pulmonary smear-positive TB who defaulted on treatment.

The national defaulter rate for 2011 was 6.1%, just short of the 6.0% target, and has declined from 7.1% in 2009 and 6.8% in 2010. In four provinces in particular – Gauteng, KwaZulu-Natal, Limpopo and Mpumalanga – the defaulter rate has improved over the last year.

At a district level, defaulter rates vary considerably across the country, from a high of 11.7% in Buffalo City (EC) to 1.1% in Umzinyathi (KZN) (Figure 14). It is encouraging that the number of districts with a defaulter rate of less than 4% has doubled over the last year.

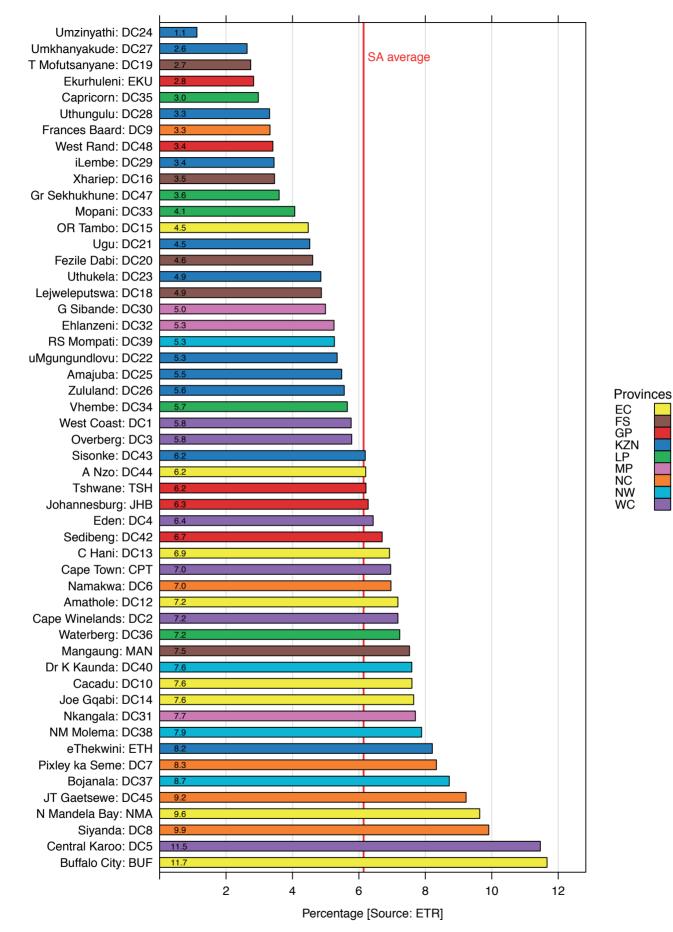
Three metros are among the eight districts with the highest defaulter rates (Buffalo City, Nelson Mandela Bay and eThekwini). Furthermore, three of the five Northern Cape districts are among the eight districts with the highest defaulter rates in the country, and in each of these districts (Siyanda, JT Gaetsewe and Pixley ka Seme), the defaulter rate has increased over the last year. In spite of reporting the lowest numbers of TB, the Central Karoo performed poorly for the second year in a row, with the second highest defaulter rate in the country.

Defaulter rates need to be examined in conjunction with patients who are lost to follow-up (LTFU).<sup>d,e</sup>So, for example, although Umkhanyakude (KZN) is the district with the second lowest defaulter rate in the country (2.6%), it has the highest LTFU rate (14.3%) in new smear-positive patients (Figure 19). If the defaulter and LTFU rate are considered together as indicative of a poorly functioning TB programme, then Umkhanyakude falls into this category.

High LTFU rates were documented in a number of other districts: West Rand (GP) (9.9%), Eden (WC) (4.5%) and Pixley ka Seme (NC) (3.9%). The summation of the defaulter and LTFU rates showed that the following districts have high rates of patients who have defaulted or are lost to follow-up: Umkhanyakude (KZN) 19.0%, Pixley ka Seme (NC) 16.3%, West Rand (GP) 14.2%, RS Mompati (NW) 14.1%, NM Molema (NW) 12.0% and eThekwini (KZN) 11.7%. These districts should strive to reduce the number of patients not evaluated.

d Bassett IV, Chetty S, Wang B, Mazibuko M, Giddy J, Lu Z, et al. Loss to follow-up and mortality among HIV-infected people co-infected with TB at ART initiation in Durban, South Africa. J Acquir Immune Defic Syndr. 2012;59(1):25-30.

e Lawn SD, Bekker LG, Middelkoop K, Myer L, Wood R. Impact of HIV infection on the epidemiology of tuberculosis in a peri-urban community in South Africa: the need for age-specific interventions. Clin Infect Dis. 2006;42(7):1040-7.



#### Figure 14: TB defaulter rate (new sm+) by district, 2011

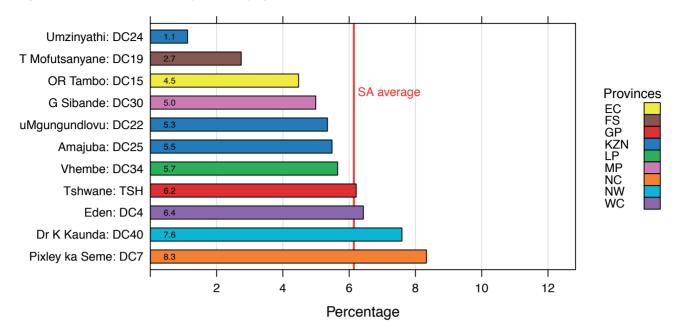
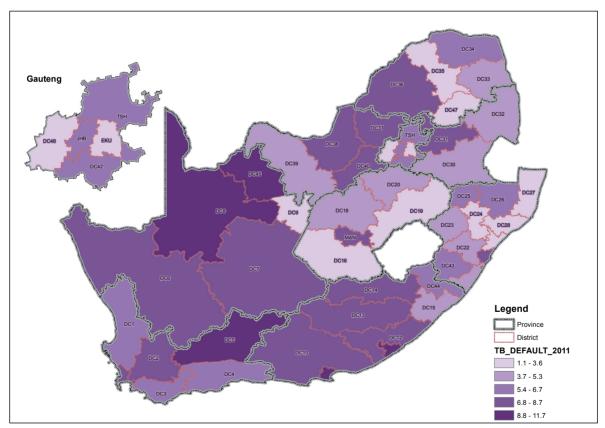


Figure 15: TB defaulter rate (new sm+) by NHI district, 2011





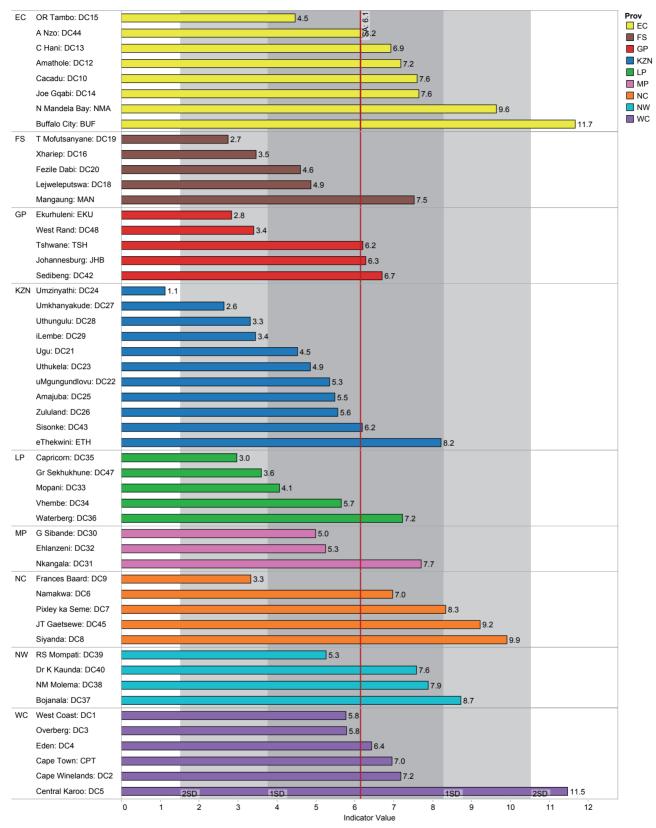


Figure 16: TB defaulter rate (new sm+) by district, grouped by province, showing standard deviations from the average, 2012/13

Units: Percentage Source: ETR

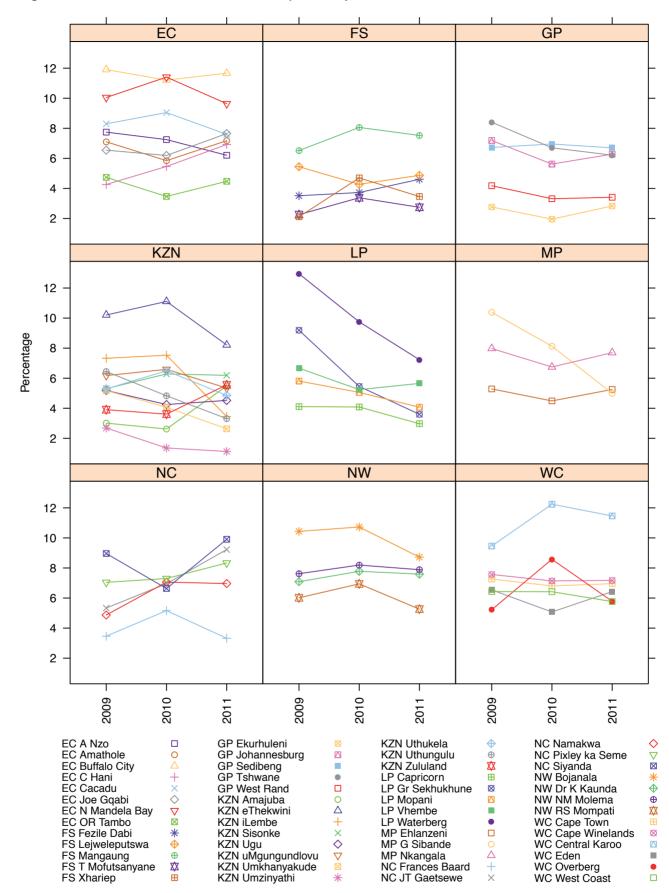


Figure 17: Annual trends: TB defaulter rate (new sm+)

#### Figure 18: Treatment outcomes (all TB), 2011

С	District_code			
0	A Nzo: DC44	11.2% 5.6%	75.2%	7.0%
	Amathole: DC12	10.4% 7.4%	72.8%	7.3%
	Buffalo City: BUF	9.7% 12.7%	70.5%	4.0%
	C Hani: DC13	13.0% 6.9%	71.0%	6.8%
	Cacadu: DC10	8.5% 8.8%	76.7%	4.5%
	Joe Gqabi: DC14	12.6% 7.5%	69.8%	8.0%
	N Mandela Bay: NMA	7.7% 10.6%	72.7%	6.7%
	OR Tambo: DC15	13.8% 6.3%	71.3%	8.1%
5	Fezile Dabi: DC20	16.9% 4.1%	71.3%	5.2%
	Lejweleputswa: DC18	12.6% 4.8%	73.7%	5.7%
	Mangaung: MAN	11.3% 8.5%	69.5%	9.3%
	T Mofutsanyane: DC19		77.2%	4.6%
	Xhariep: DC16	9.9% 3.7%	79.4%	5.1%
>	Ekurhuleni: EKU	6.3%	86.5%	3.7%
	Johannesburg: JHB		81.9%	4.8%
				3.6%
	Sedibeng: DC42	10.7% 7.8%	76.8%	
	Tshwane: TSH	8.3% 6.8%	78.7%	3.7%
	West Rand: DC48	10.8% 7.0% 3.5%	70.3%	7.4%
ZN	Amajuba: DC25	10.9% 5.6%	74.6%	7.0%
		3.5% <mark>6.3% 8.6%</mark>	76.2%	4.7%
	iLembe: DC29	7.9% 4.9% 5.4%	75.3%	5.6%
	Sisonke: DC43	9.2% 7.2%	70.2%	10.5%
	Ugu: DC21	7.5% 5.3%	72.9%	10.0%
	uMgungundlovu: DC22	8.5% 5.7%	78.5%	5.1%
	Umkhanyakude: DC27	16.4% 3.3% 8.2%	64.0%	5.3%
	Umzinyathi: DC24	11.0%	77.1%	8.4%
	Uthukela: DC23	9.2% 4.4%	80.1%	5.7%
	Uthungulu: DC28	4.8% 3.7%	85.2%	4.5%
	Zululand: DC26	10.5% 6.9%	75.4%	4.7%
>	Capricorn: DC35	14.6% 4.1%	56.8%	21.8%
	Gr Sekhukhune: DC47	16.3% 4.4%	67.6%	9.4%
	Mopani: DC33	15.2% 3.9%	71.5%	5.5%
	Vhembe: DC34	5.6% 8.0% 6.0%	69.1%	10.4%
	Waterberg: DC36	11.9% 7.2%	65.3%	13.4%
Р	Ehlanzeni: DC32	7.9% 4.6%	77.8%	7.7%
	G Sibande: DC30	9.0% 7.4%	72.2%	10.0%
	Nkangala: DC31	9.8% 7.8%	74.6%	6.3%
с	Frances Baard: DC9	14.9% 3.8%	74.3%	5.0%
		4.0% 10.6% 9.0%	72.0%	
	Namakwa: DC6	7.0% 8.4%	76.0%	4.6%
	Pixley ka Seme: DC7	8.0% 10.2% 9.1%	67.3%	3.9%
	Siyanda: DC8	3.2% 10.9% 9.2%	73.0%	0.978
N	Bojanala: DC37	11.3% 8.7%	66.8%	9.6%
••	Dr K Kaunda: DC40	13.6% 7.9%	68.2%	7.7%
		13.6%         7.9%           5.1%         8.5%         8.0%	68.2%	10.6%
	NM Molema: DC38			
~	RS Mompati: DC39	8.8% 10.6% 6.0%	70.5%	3.1%
С	Cape Town: CPT	4.1% 8.3%	83.1%	3.0%
	Cape Winelands: DC2	4.3% 9.3%	79.0%	3.4%
	Central Karoo: DC5	5.9% 12.0%	77.5%	
	Eden: DC4	4.6% 5.0% 6.8%	79.4%	3.0%
	Overberg: DC3	3.7% 8.8%	78.9%	6.0%
			70.40/	
	West Coast: DC1	4.8% 8.3%	79.1%	4.4%

SYSTEM GEN OUTCOME (group)
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Died

Failed

Not Evaluated (lost to follow up)

rov C	District_code A Nzo: DC44	8.2% 6.2% 6.4%	71.9%	6.0
	Amathole: DC12	6.4% 7.2% 15.9%	61.8%	6.4
	Buffalo City: BUF	7.0% 11.7% 19.1%	55.4%	
	C Hani: DC13	8.6% 6.9% 5.7%	70.1%	7.29
	Cacadu: DC10	6.2% 7.6% 4.4%	75.1%	4
	Joe Gqabi: DC14	7.8% 7.6% 6.3%	68.1%	7.6%
	N Mandela Bay: NMA	4.9% 9.6% 10.5%	66.4%	6.2
	OR Tambo: DC15	6.8% 4.5% 10.3%	73.6%	4
s	Fezile Dabi: DC20	3.6% 10.5% 4.6%	75.1%	
	Lejweleputswa: DC18	3.1% 10.6% 4.9% 6.3%	69.4%	4
	Mangaung: MAN	7.4% 7.5% 9.7%	66.3%	7.29
	T Mofutsanyane: DC19		77.6%	
	Xhariep: DC16	6.6% 3.5% 4.0%	78.7%	4
P	Ekurhuleni: EKU	5.4% 2.8%	86.2%	4
	Johannesburg: JHB	4.4% 6.3%	81.4%	4
	Sedibeng: DC42	8.4% 6.7%	80.1%	
	Tshwane: TSH	6.5% 6.2%	79.5%	
	West Rand: DC48	9.9% 5.2% 3.4%	73.4%	5.
ZN	Amajuba: DC25	7.5% 5.5% 7.8%	69.4%	7.19
	eThekwini: ETH	4.3% 8.2% 9.3%	70.8%	4
	iLembe: DC29	4.0% 3.4%	84.5%	4
	Sisonke: DC43	7.7% 6.2% 4.1%	70.1%	8.8%
	Ugu: DC21	5.8% 4.5% 9.9%	70.4%	6.0
	uMgungundlovu: DC22	6.8% 5.3%	80.7%	
	Umkhanyakude: DC27		63.8%	4
	Umzinyathi: DC24	3.0% 7.6%	80.7%	6.:
	Uthukela: DC23	6.4% 4.9% 8.3%	73.1%	5
	Uthungulu: DC28	3.6% 3.3%	86.3%	
	Zululand: DC26	8.1% 5.6%	77.9%	4
	Capricorn: DC35	8.5% 3.0%	76.5%	9.6%
	Gr Sekhukhune: DC47	11.5% 3.6%	75.5%	5.
	Mopani: DC33	3.1% 8.6% 4.1% 3.1%	76.2%	
	Vhembe: DC34	6.0% 5.7%	79.3%	5
	Waterberg: DC36	8.2% 7.2% 4.7%	69.2%	9.0%
	Ehlanzeni: DC32	5.9% 5.3% 7.8%	73.0%	5
	G Sibande: DC30	7.2% 5.0% 11.1%	68.3%	6.
	Nkangala: DC31	7.8% 7.7% 11.4%	65.7%	5
:	Frances Baard: DC9	8.1% 3.3% 7.6%	75.8%	
	JT Gaetsewe: DC45	3.6% 3.9% 8.1% 9.2% 17.7%	55.1%	
	Namakwa: DC6	5.7% 7.0% 6.2%	72.4%	5
	Pixley ka Seme: DC7	3.9% 7.5% 8.3% 7.8%	66.3%	
	Siyanda: DC8	3.5% 5.3% 9.9% 6.2%	71.3%	
/	Bojanala: DC37	7.7% 8.7% 5.9%	66.9%	8.8%
	Dr K Kaunda: DC40	8.7% 7.6% 6.5%	69.9%	6
	NM Molema: DC38	7.6% 7.9% 10.7%	65.9%	
	RS Mompati: DC39	8.4% 5.3% 4.3%	75.8%	
;	Cape Town: CPT	2.8% 7.0% 2.9%	83.1%	
	Cape Winelands: DC2	3.3% 7.2% 4.2%	80.2%	
	Central Karoo: DC5	2.8% 3.2% 11.5% 5.9%	73.1%	
	Eden: DC4	4.5% 3.6% 6.4% 3.0%	73.1%	
	Overberg: DC3	4.5% 3.0% 5.8% 3.7%	78.1% 80.4%	6.
	West Coast: DC1	2.8% 3.4% 5.8% 3.6%	80.4% 79.9%	0.1
	I Total	2.8% 3.4% 5.8% 3.6% 6.2% 6.1% 5.6%	79.9%	

# Figure 19: Treatment outcomes (new sm+), 2011

SYSTEM GEN OUTCOME Transferred Out Cured

Completed

Completed Defaulted Died Failed Not Evaluated (lost to follow up)

# **10 HIV and AIDS**

# **Thesandree Padayachee**

In covering aspects of HIV prevention and treatment, this chapter presents the male condom distribution coverage<sup>a</sup> and two new indicators that have not previously been included in the District Health Barometer (DHB). These indicators provide the total number of adults remaining on antiretroviral treatment (ART) at the end of the month, and the total number of children under 15 years of age remaining on ART at the end of the month. The new indicators provide cross-sectional reports on the number of adults and children on ART in South Africa and allow for monitoring of the expanded ART programme in South Africa; as these new indicators are count indicators, they alone do not give clear indications of enrolment, coverage or adherence.

## 10.1 Male condom distribution coverage

The male condom distribution coverage refers to the number of male condoms distributed by the Department of Health's public health facilities (and other outlets) in one year to males who are 15 years and older. Condom distribution is considered to be a structural-level intervention that is effective in increasing condom acquisition and carrying of condoms, promoting delayed sexual initiation and reducing the incidence of sexually transmitted diseases (STIs). The effect is the greatest when targeted condom distribution efforts are combined with individual and community-level behaviour change interventions.<sup>b</sup>

The distribution of condoms is an integral part of South Africa's HIV and AIDS Counselling and Testing (HCT) Campaign. This campaign focuses on behaviour change, provision and promotion of barrier methods (condoms), provision of male circumcision, scaling up syndromatic management of sexually transmitted diseases, and early prevention of mother-to-child HIV transmission as the primary modes of reducing the number of new HIV infections in the country.<sup>b</sup>

Evidence suggests that for every 500 condoms distributed, one new HIV infection is averted.<sup>c</sup> This supports the continued expansion of condom distribution across the country. The National Department of Health (NDoH) has therefore set an ambitious target of distributing 1 billion condoms annually (approximately 48 per male per year) by 2016.<sup>d</sup>

The total number of condoms distributed through health facilities in South Africa was approximately 387 million in 2012/13, compared to the 272 million distributed in 2011/12. This represents an increase of about 40%. On average, 22.1 male condoms were distributed per male 15 years and older in 2012/13. This is almost four-and-a-half times that of the base rate of 4.6 in 2000/01. As can be seen in Figure 1, there was wide variation in the condom distribution rate across the districts. All provinces, with the exception of the Northern Cape (NC), had increases in the numbers of male condoms distributed. The Western Cape (WC) had the largest condom distribution rate of 56.1 per male, which was an almost 20% increase from the 2011/12 rate of 45.7. The provinces with the lowest condom distribution rates were the Northern Cape (NC) and Gauteng (GP) with average rates of 8.0 and 10.3 respectively. KwaZulu-Natal (KZN) and North West (NW) provinces reported the most significant increases, from 11.1 and 6.0 in 2011/12 to 25.9 and 17.7 in 2012/13 respectively.

The two top-performing districts were in KwaZulu-Natal. The most notable increase was in Uthukela District, where the condom distribution coverage increased from 10.4 in 2011/12 to 69.3 in 2012/13. Similar improvements were noted in Amajuba and uMgungundlovu districts. Six of the top 10 districts with the highest condom distribution coverage were in the Western Cape and four in KwaZulu-Natal.

As shown in Figure 2, male condom distribution coverage across the 11 NHI districts varied substantially, with four of the 11 NHI districts, Amajuba (69.0), uMgungundlovu (55.2), Umzinyathi (42.8) in KZN and Eden in WC (42.5) performing significantly above the national average of 22.1. While this finding is promising, the fact that the remaining seven NHI districts have performed below the national average is of concern. Condom distribution rates decreased in Vhembe (LP) and Pixley ka Seme (NC) from 20.8 and 12.2 in 2011/12, to 14.9 and 11.8 in 2012/13 respectively. Immediate action is necessary to ensure that the basic and most effective structural-level interventions remain high on the service delivery platforms for HIV prevention in these districts.

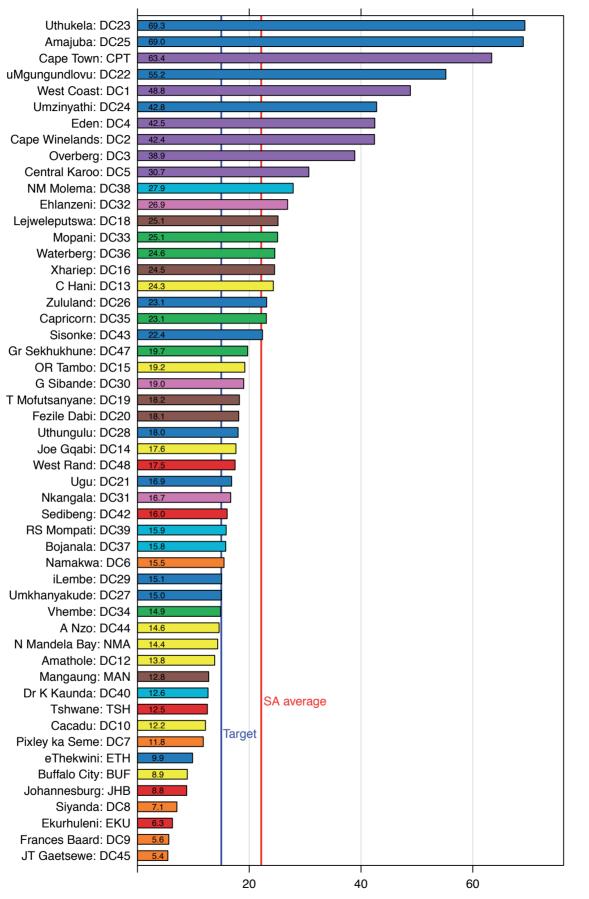
Figure 4 shows that the condom distribution coverage in most districts for the period between 2002/03 and 2012/13 demonstrated a modest upward trend, except for four districts in the Western Cape and three districts in KwaZulu-Natal, where steep and significant increases were observed. Whilst KwaZulu-Natal had been in line with national condom distribution coverage trends until 2010/11, there was a sharp rise in the coverage thereafter. Similar accelerated increases were noted in the Western Cape since 2005/06. However, this rate appears to be peaking across four of the Western Cape districts in 2012/13, possibly due to saturation being reached.

a The indicator name changed from "male condom distribution rate" to "male condom distribution coverage" in April 2013.

b Charania MR, Crepaz N, Guenther-Gray C, Henny K, Liau A, Willis LA, Lyles CM. Efficacy of structural-level condom distribution interventions: a metaanalysis of U.S. and international studies, 1998-2007. AIDS Behav 2011 Oct;15(7):1283-97.

c UNAIDS. World AIDS Day Report 2011. Geneva: Joint United Nations Programme on HIV/AIDS; 2011.

d South African National AIDS Council. National Strategic Plan on HIV, STIs and TB 2012-2016. 2011 [cited 2012 Oct 01]; Available from: http://www.sanac. org.za/files/uploaded/27%20Jan%202012%20Full.pdf



### Figure 1: Male condom distribution coverage by district, 2012/13

Number of condoms per male 15 years and older [Source: DHIS]

Provinces

EC FS

GP

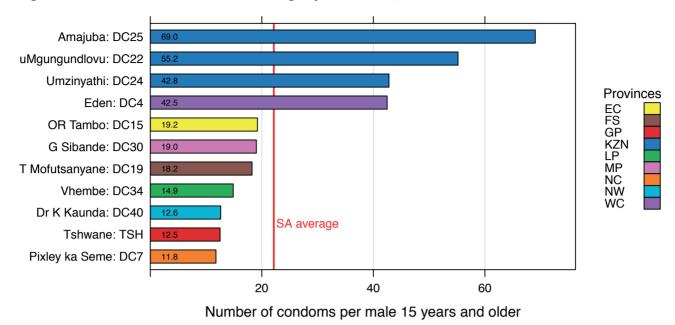
LP MP

NC

NW

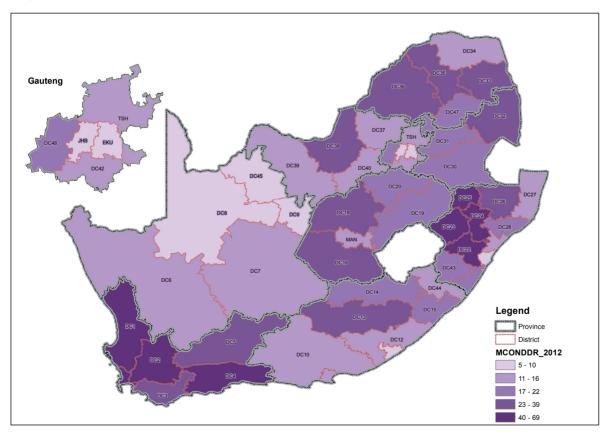
WC

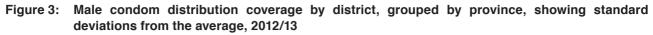
KZN

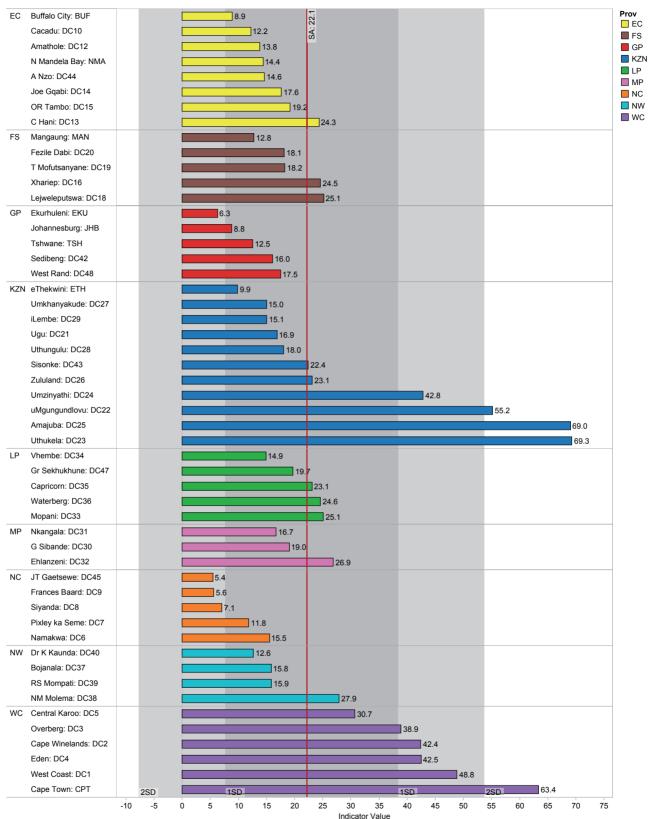


### Figure 2: Male condom distribution coverage by NHI district, 2012/13

Map 1: Male condom distribution coverage by district, 2012/13

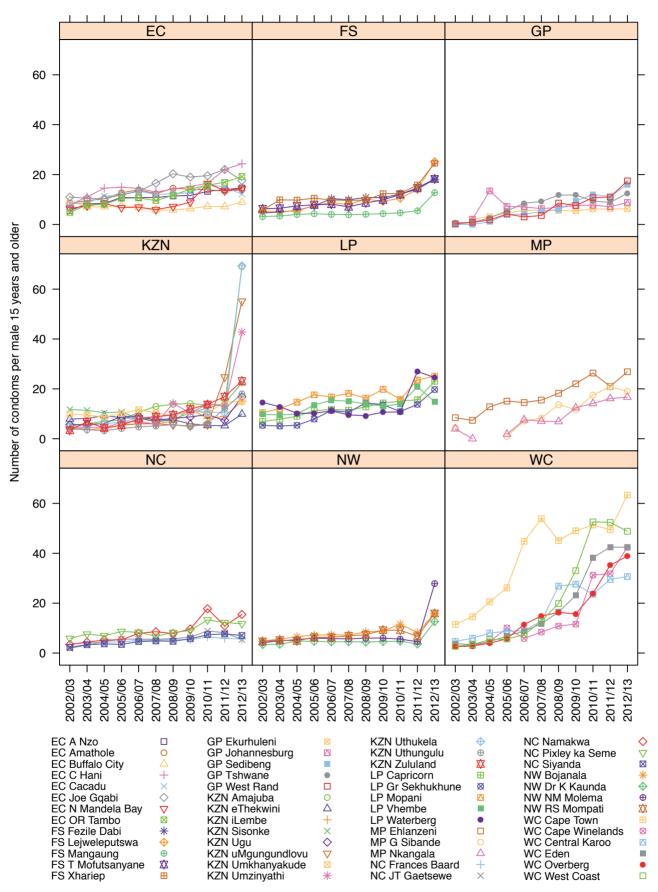






Units: Number of condoms per male 15 years and older Source: DHIS





# 10.2 Adults remaining on ART at the end of the month - total

South Africa has the largest antiretroviral treatment (ART) programme in the world.<sup>e</sup> By the end of 2011, there were approximately 1.4 million people receiving ARTs.<sup>f</sup> At that point, about 2 500 facilities were offering ART which will eventually be extended to all facilities in line with the targeted prevention and treatment interventions outlined in the National Strategic Plan (2012-2016).<sup>d</sup> As evidence suggests, ART for people living with HIV can greatly reduce the risk of sexual transmission of HIV to an HIV-negative partner, and the appropriate use of ART among pregnant women who test HIV-positive will reduce vertical transmission to their unborn babies.<sup>g</sup>

The South African Antiretroviral Treatment Guidelines (2013) will have a positive impact on improving access to ART, as it sets the scene for life-long initiation of co-infected TB patients and the immediate initiation of all HIV-positive pregnant women onto antiretroviral (ARV) medication, regardless of their CD4 count.<sup>f,h</sup> These changes and the introduction of fixed-dose combination (FDC) therapy from April 2013 are ultimately aimed at improving access to ART for those who are eligible for treatment. The nurse-initiated management of ART (NIMART) introduced into the South African healthcare system has also been shown to increase access to ARVs and to improve the cost-effectiveness of the ART programmes whilst maintaining a high quality of patient care.<sup>f</sup>

The number of adults remaining on ART at the end of the month represents all those adults started on ART but who have not yet had any outcome (e.g. death, loss-to-follow-up). This is a count indicator that measures the cumulative number of adults on ART at the end of each month. Clients who have had an outcome (e.g. death) in the specified month or in previous months are not included in the monthly total. For the DHB's purposes, the monthly value at the end of the financial year, March 2013, was used as the annual value.

The indicator is used to monitor the roll-out of ART and is a useful gauge of government's effort to expand the ART programme in South Africa. The indicator is also used to inform drug forecasting activities; however, more detailed information regarding regimens is necessary to predict drug consumption accurately. This indicator does not provide any information on adherence. If patients are left in the cumulative count and not excluded when appropriate, this can lead to an overestimation of the number of adults on ARV treatment.

Figure 5 shows that the total number of South African adults who remained on ART increased by about 33%, from 1 439 445 at the end of 2011/12 to 2 161 170 by the end of 2012/13. All provinces demonstrated an increase. Mpumalanga (MP) reported an increase of more than 50%, from 127 458 in 2011/12 to 199 538 in 2012/13. Of all the provinces in South Africa, Gauteng made the most notable progress and has increased the number of adults on ARVs by more than 100%, with 505 644 adults in 2012/13 compared to 246 295 in 2011/12. The Northern Cape had the fewest number of adults on ARVs, which is in line with their low prevalence rate and small population, but still showed an increase from 17 348 in 2011/12 to 23 377 in 2012/13.

There is great variation between districts in relation to this indicator. eThekwini Metropolitan District (KZN) had the most adults (207 091) remaining on ART at the end of 2012/13. This was followed by three of Gauteng's six districts: Johannesburg (177 176), Ekurhuleni (133 864) and Tshwane (106 067). The district with the lowest number of people (827) on ART in 2012/13 was Central Karoo in the Western Cape. Gert Sibande (MP), which had the highest antenatal HIV prevalence of 46.1% in 2011,<sup>i</sup> reported a seven-fold increase in the number of adults on ART, from 6 956 in 2010/11 to 54 079 in 2012/13. This large increase could be the result of poor reporting in the past, or of aggressive targeted efforts to initiate eligible patients onto ART.

Figure 8 shows comparative annual trends for the number of adults remaining on ART at the end of the financial year over a period of three years. All districts appear to be following an upward trend. The trend in Gauteng indicates a steep increase in the number of adults remaining on ART over the three-year period across all districts in the province.

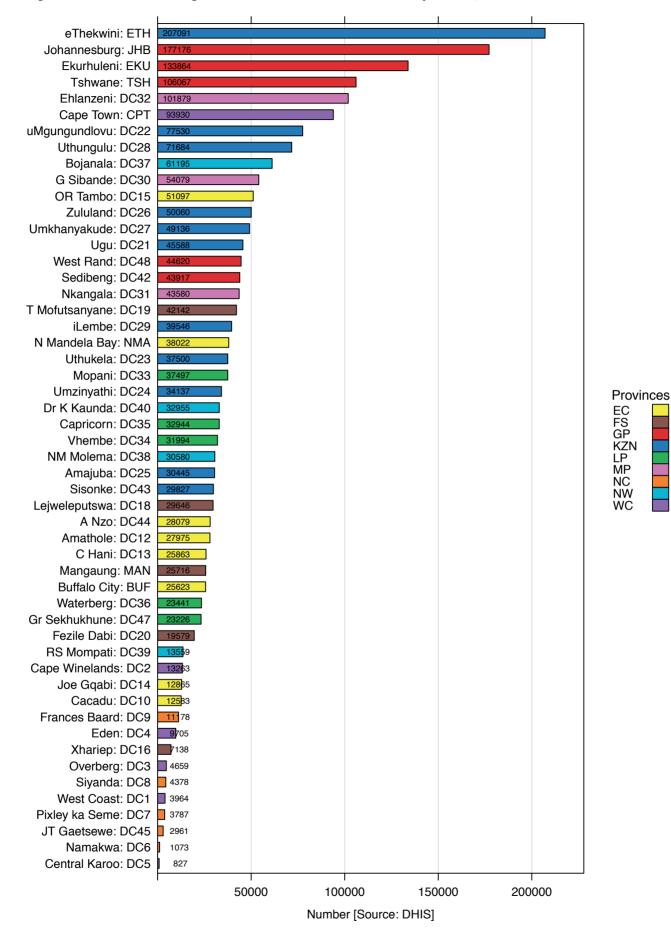
e UNAIDS. Global report on the global AIDS epidemic 2012. Geneva: Joint United Nations Programme on HIV/AIDS; 2012.

f Nyasulu JCY ME, Mazwi S, Ratshefola M. NIMART rollout to primary healthcare facilities increases access to antiretrovirals in Johannesburg: An interrupted time series analysis. SAMJ. 2013;103(4):232-6.

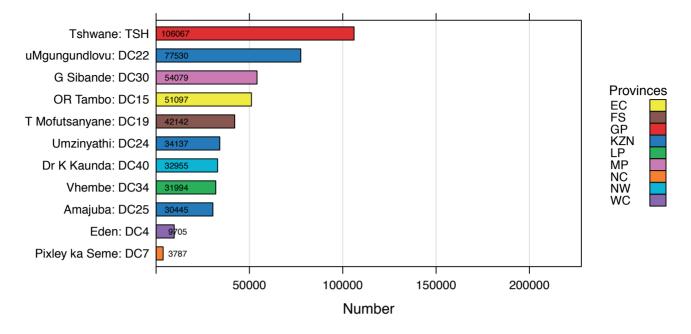
g UNAIDS. Countdown to Zero: Global plan towards the elimination of new HIV infections among children by 2015, and keeping their mothers alive (2011-2015). Geneva: Joint United Nations Programme on HIV/AIDS; 2011.

h National Department of Health. The South African Antiretroviral Guidelines (2013). Pretoria: National Department of Health; 2013.

i National Department of Health. The 2011 National Antenatal Sentinel HIV and Syphilis Prevalence Survey. Pretoria: National Department of Health; 2011.

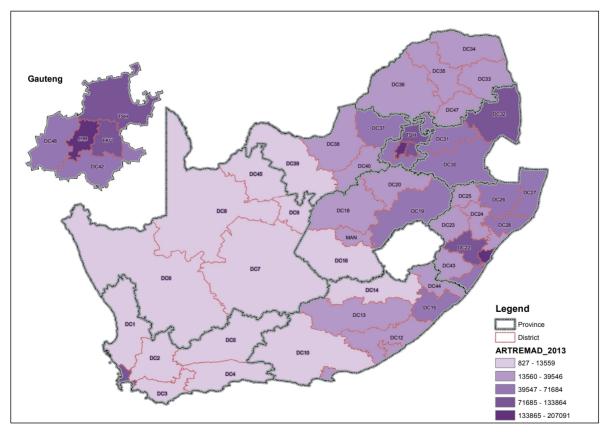






### Figure 6: Adults remaining on ART at end of the month – total by NHI district, end of 2012/13

## Map 2: Adults remaining on ART at end of the month – total by district, 2012/13



# Figure 7: Adults remaining on ART at end of the month – total by district, grouped by province, 2012/13

EC		
	Cacadu: DC10	12,583
	Joe Gqabi: DC14	12,865
	Buffalo City: BUF	25,623
	C Hani: DC13	25,863
	Amathole: DC12	27,975
	A Nzo: DC44	28,079
	N Mandela Bay: NMA	38,022
	OR Tambo: DC15	51,097
S	Xhariep: DC16	7,138
	Fezile Dabi: DC20	19,579
	Mangaung: MAN	25,716
	Lejweleputswa: DC18	29,646
	T Mofutsanyane: DC19	42,142
θP	Sedibeng: DC42	43,917
	West Rand: DC48	44,620
	Tshwane: TSH	106,067
	Ekurhuleni: EKU	133,864
	Johannesburg: JHB	177,176
(ZN	Sisonke: DC43	29,827
	Amajuba: DC25	30,445
	Umzinyathi: DC24	34,137
	Uthukela: DC23	37,500
	iLembe: DC29	39,546
	Ugu: DC21	45,588
	Umkhanyakude: DC27	49,136
	Zululand: DC26	50,060
	Uthungulu: DC28	71,684
	uMgungundlovu: DC22	77,530
	eThekwini: ETH	207,091
		207,091
Ρ	Gr Sekhukhune: DC47	23,226
Ρ		
Ρ	Gr Sekhukhune: DC47	23,226
Ρ	Gr Sekhukhune: DC47 Waterberg: DC36	23,226 23,441
	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34	23,226 23,441 31,994
	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricorn: DC35	23,226 23,441 31,994 32,944
	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricorn: DC35 Mopani: DC33	23,226 23,441 31,994 32,944 37,497
	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricom: DC35 Mopani: DC33 Nkangala: DC31	23,226 23,441 31,994 32,944 37,497 43,580
IP	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricom: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32	23,226 23,441 31,994 32,944 37,497 43,580 54,079
IP	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricorn: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879
IP	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricorn: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879
IP	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricorn: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6 JT Gaetsewe: DC45	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879 1,073 2,961
IP	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricom: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6 JT Gaetsewe: DC45 Pixley ka Seme: DC7	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879 1,073 2,961 3,787
P	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricom: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6 JT Gaetsewe: DC45 Pixley ka Seme: DC7 Siyanda: DC8	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879 1,073 2,961 3,787 4,378
P C	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricom: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6 JT Gaetsewe: DC45 Pixley ka Seme: DC7 Siyanda: DC8 Frances Baard: DC9	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879 1,073 2,961 3,787 4,378 11,178
P C	Gr Sekhukhune: DC47 Waterberg: DC36 Vhembe: DC34 Capricom: DC35 Mopani: DC33 Nkangala: DC31 G Sibande: DC30 Ehlanzeni: DC32 Namakwa: DC6 JT Gaetsewe: DC45 Pixley ka Seme: DC7 Siyanda: DC8 Frances Baard: DC9 RS Mompati: DC39	23,226 23,441 31,994 32,944 37,497 43,580 54,079 101,879 1,073 2,961 3,787 4,378 11,178 11,178
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Units: Number Source: DHIS

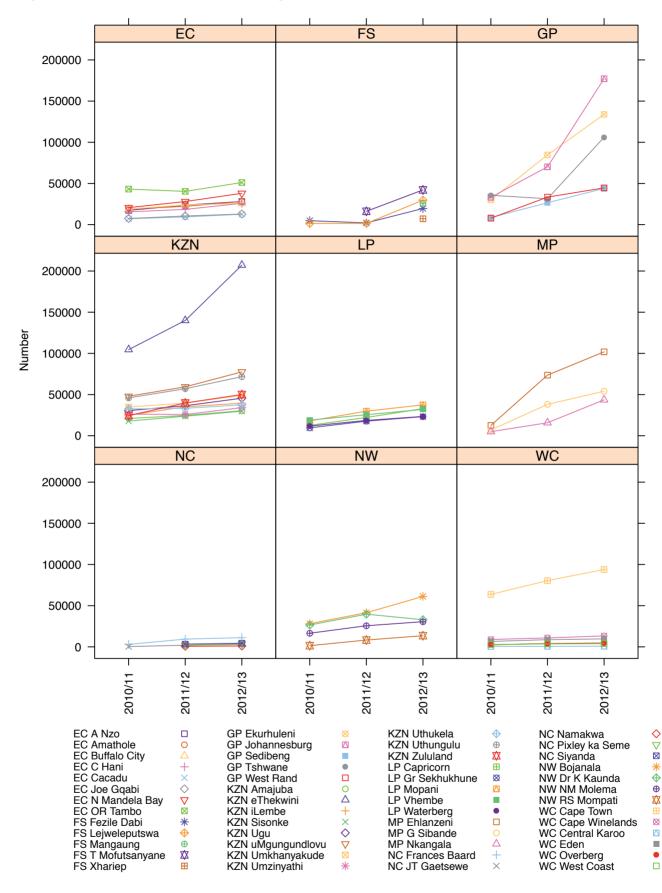


Figure 8: Annual trends: Adults remaining on ART at end of the month - total

## 10.3 Children under 15 years remaining on ART at end of the month - total

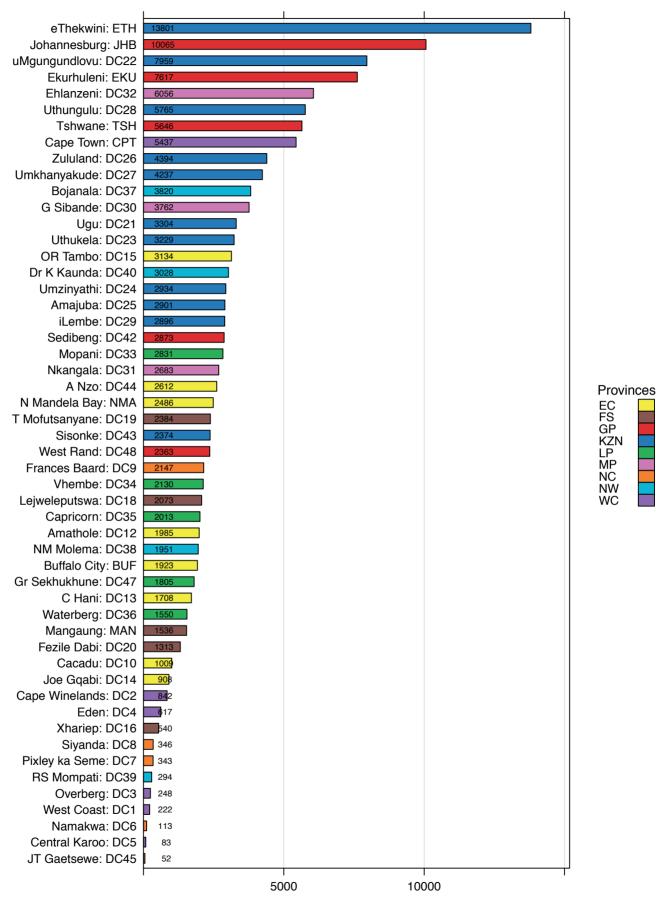
One of the specific aims of the 2013 South African Antiretroviral Guidelines is to improve ART services to children and adolescents by testing all HIV-exposed children under five years of age and treating all those found to be infected with HIV. The guidelines also aim to standardise first- and second-line therapy for children, adolescents and adults in the public and private sectors.<sup>h</sup> These initiatives will hopefully improve ART programmes for children under 15 years who are HIV-positive, especially for those under the age of two who have been shown to benefit greatly from early initiation onto ART.<sup>j</sup>

The total number remaining on ART at the end of the reporting month is the cumulative number of children under 15 years who are on a current ART regimen and children under 15 years who are not yet considered lost to follow-up (LTFU). The number of children under 15 years remaining on ART at the end of the month represents all those children under 15 years started on ART but who have not yet had any outcome (e.g. death, loss-to-follow-up) that takes them out of the system. Clients who have had an outcome (e.g. death) in the specified month or previous months are not included in the monthly total. For the DHB's purposes, the monthly value at the end of the financial year (e.g. March 2013) was used for the annual value.

The total number children under the age of 15 who remained on ART at the end of 2012/13 was 148 342. KwaZulu-Natal and Gauteng districts had the largest number of children on ART, as a result of their large populations and high HIV prevalence. eThekwini (KZN) had the highest number of children under 15 on ARVs (13 801), followed by Johannesburg (GP) (10 065) and uMgungundlovu (KZN) (7 959). The 10 districts with the highest numbers account for 47% (70 977) of the total number of children under 15 on ART in the country. The districts with the lowest number of children under 15 years of age on ART were the Central Karoo (WC) with 83 and JT Gaetsewe (NC) with 52.

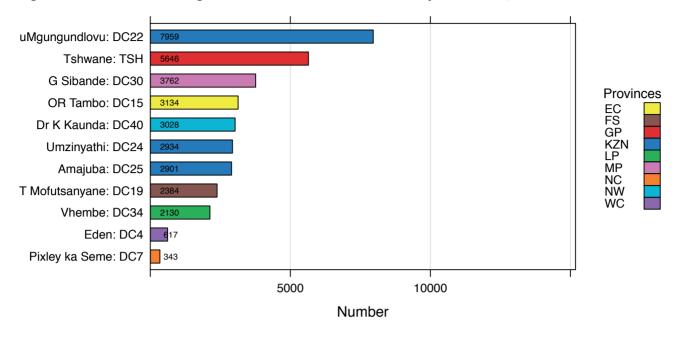
Trend analysis for this indicator over the past three years (2010/11 – 2012/13) mirrors the pattern seen for adults (Figure 12). The pattern suggests an upward trend across all districts. In the last year, the three metropolitan districts in Gauteng, namely Johannesburg, Tshwane and Ekurhuleni, recorded steep rises in the number of children under 15 years on ART.

Violari A, Cotton MF, Gibb DM, Babiker AG, Steyn J, Madhi SA, et al. Early antiretroviral therapy and mortality among HIV infected infants. NEngl Med. 2008;3 59(21):2233-44.



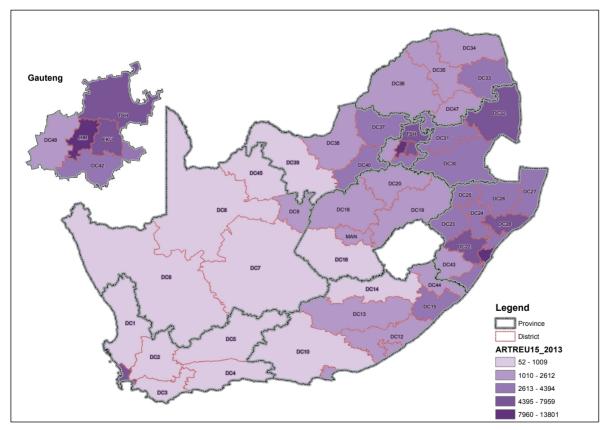
### Figure 9: Children remaining on ART at end of the month – total by district, end of 2012/13





### Figure 10: Children remaining on ART at end of the month - total by NHI district, end of 2012/13





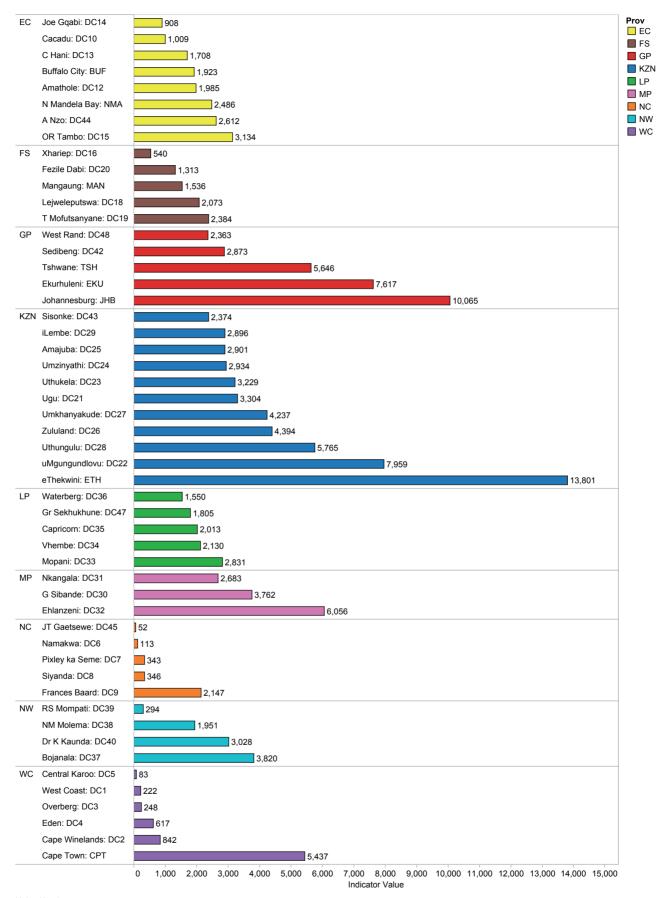
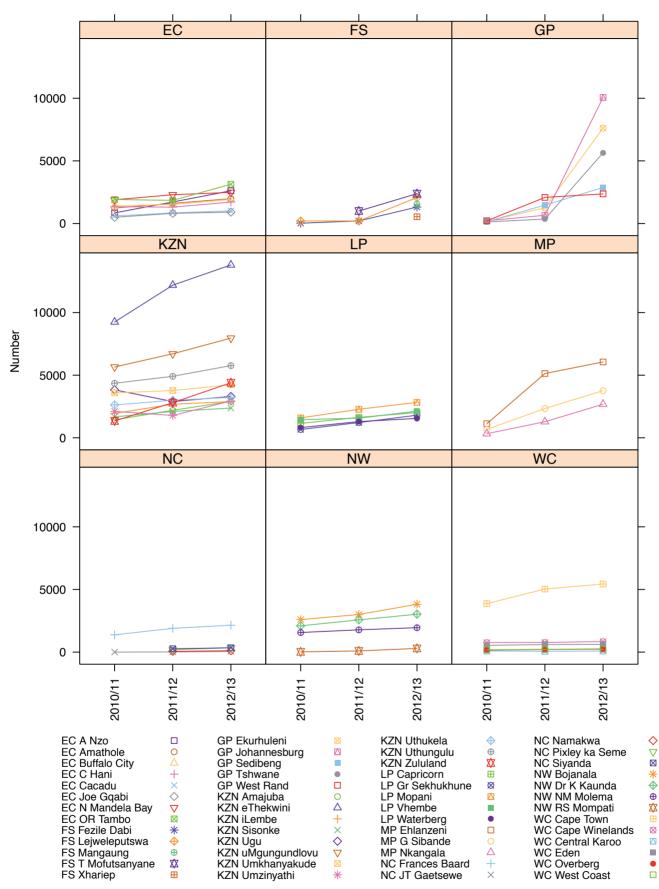


Figure 11: Children remaining on ART at end of the month - total by district, grouped by province, 2012/13

Units: Number Source: DHIS



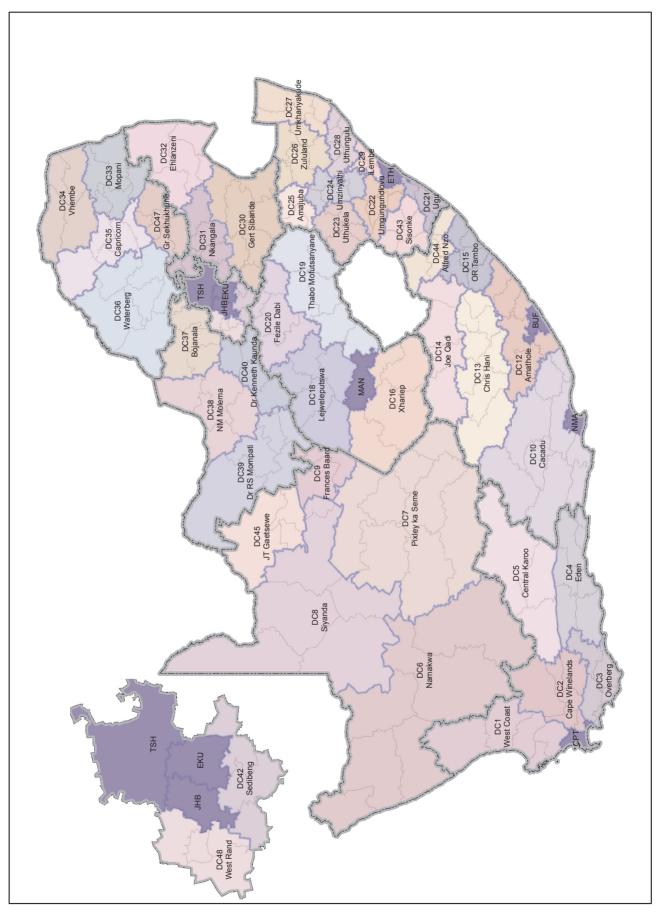


# Section B: National and District Profiles

# Contents

11	South Africa	220
12	Eastern Cape Province	238
	Buffalo City Metropolitan Municipality: BUF	238
	Cacadu District Municipality: DC10	241
	Amathole District Municipality: DC12	244
	Chris Hani District Municipality: DC13	247
	Joe Gqabi District Municipality: DC14	250
	OR Tambo District Municipality: DC15	253
	Alfred Nzo District Municipality: DC44	257
	Nelson Mandela Bay Metropolitan Municipality: NMA	260
13	Free State Province	263
	Xhariep District Municipality: DC16	263
	Lejweleputswa District Municipality: DC18	267
	Thabo Mofutsanyane District Municipality: DC19	270
	Fezile Dabi District Municipality: DC20	274
	Mangaung Metropolitan Municipality: MAN	278
14	Gauteng Province	281
	Sedibeng District Municipality: DC42	281
	West Rand District Municipality: DC48	285
	Ekurhuleni Metropolitan Municipality: EKU	289
	City of Johannesburg Metropolitan Municipality: JHB	293
	City of Tshwane Metropolitan Municipality: TSH	297
15	KwaZulu-Natal Province	301
	Ugu District Municipality: DC21	301
	uMgungundlovu District Municipality: DC22	304
	Uthukela District Municipality: DC23	307
	Umzinyathi District Municipality: DC24	310
	Amajuba District Municipality: DC25	313
	Zululand District Municipality: DC26	317
	Umkhanyakude District Municipality: DC27	320
	Uthungulu District Municipality: DC28	324
	iLembe District Municipality: DC29	328
	Sisonke District Municipality: DC43	331
	eThekwini Metropolitan Municipality: ETH	335

16	Limpopo Province	338
	Mopani District Municipality: DC33	338
	Vhembe District Municipality: DC34	341
	Capricorn District Municipality: DC35	344
	Waterberg District Municipality: DC36	347
	Greater Sekhukhune District Municipality: DC47	350
17	Mpumalanga Province	353
	Gert Sibande District Municipality: DC30	353
	Nkangala District Municipality: DC31	357
	Ehlanzeni District: DC32	361
18	Northern Cape Province	365
	John Taolo Gaetsewe District Municipality: DC45	365
	Namakwa District Municipality: DC6	368
	Pixley ka Seme District Municipality: DC7	372
	Siyanda District Municipality: DC8	375
	Frances Baard District: DC9	378
19	North West Province	382
	Bojanala Platinum District: DC37	382
	Ngaka Modiri Molema District: DC38	386
	Ruth Segomotsi Mompati District: DC39	389
	Dr Kenneth Kaunda District: DC40	392
20	Western Cape Province	396
	Cape Town Metropolitan District: CPT	396
	West Coast District: DC1	400
	Cape Winelands District: DC2	403
	Overberg District: DC3	406
	Eden District: DC4	409
	Central Karoo District: DC5	412
Ар	pendix 1:	416
	Definitions and sources	416



# 11 South Africa

# Naomi Massyn

South Africa had an estimated population of 50.8 million people in 2011. The population density, age and gender structure vary dramatically across districts in the country. Only 16.9% of people belonged to a medical aid scheme.

Provincial and local government expenditure on district health services per capita (uninsured) has increased over eight years in real terms<sup>a</sup> from R659 in 2004/05 to R1 327 in 2012/13. Gauteng (GP) at R1 199 and Free State (FS) at R1 207 have the lowest expenditure per capita. KwaZulu-Natal (KZN) at R1 301 and North West Province (NW) at R1 247 also fall below the national average. Limpopo (LP) spent the most per capita (R1 501).

Provincial primary health care (PHC) expenditure per capita (uninsured), in real terms, increased nationally over eight years from R324 in 2004/05 to R780 in 2012/13. Provincially, Gauteng had the highest expenditure per capita at R928, and Mpumalanga (MP) had the lowest at R643.

The expenditure per PHC headcount has increased nationally in real terms over eight years from R132 in 2004/05 to R255 in 2012/13. Limpopo spent the lowest per headcount (R221) and the Gauteng the highest (R335).

The national proportion of district health services expenditure on district management varied between a low of 4.8% in 2005/06 and the current high of 5.8% in 2012/13. A wide variation of expenditure on district management exists between the provinces. The provinces with the lowest percentage expenditure are KwaZulu-Natal (2.1%), Free State (3.5%) and Western Cape (WC) (4.8%). The provinces with the highest percentage are Mpumalanga (8.7%), Northern Cape (NC) (9.3%) and North West (9.5%).

The national average for the proportion of district health services expenditure on district hospitals is 37.5%. Provincially, the spending ranged from 20.7% (Gauteng) to 49.4% (Limpopo).

The national proportion of district health services expenditure on non-hospital PHC is 56.7%. Provincially, the spending ranged from 43.3% (Limpopo) to 73.2% (Gauteng).

The PHC supervisor visit rate (fixed clinic/CHC/CDC) average for South Africa was 76%, representing a small increase of 1.9 percentage points from the average in 2011/12. Of the 52 districts, 29 were above the national average, with 26 of these achieving the national target of 80%. Seven districts recorded 50% and lower, four of which were in KwaZulu-Natal.

The South African average length of stay (ALOS) was 4.2 days. At district level, Frances Baard (NC) has the shortest ALOS (1.1 days) followed by Xhariep (FS) (2.1 days). In contrast, both Uthungulu and iLembe districts in KwaZulu-Natal had the longest ALOS (6.8 days), followed by Buffalo City (6.3 days) in the Eastern Cape (EC).

The SA average for the bed utilisation rate (BUR) has been about 65% over the last five years, with a low of 64.7% in 2010/11 and a high of 68.0% in 2008/09. The 2012/13 BUR is 67.3%, which is a minimal increase from 67.2% in 2011/12. The highest BUR was 94.3% for the City of Cape Town (WC) and the lowest was Frances Baard (NC) at 43.6%.

In 2012/13, the average expenditure per patient day equivalent (PDE) in South Africa for all district hospitals was R1 823, which is higher than the 2011/12 value of R1 740. Gauteng districts had high values on the whole, and the Western Cape (apart from the City of Cape Town) showed a low expenditure per PDE.

The 2012/13 value for the ratio of ambulatory to inpatient days was 1.3. A ratio below 1 means that fewer clients were seen at the emergency unit/OPD clinics than were admitted into hospital, whereas a ratio above 1 means that more clients were seen at the emergency unit/OPD clinics than were admitted into hospital. The highest ratio (7.9) was in Amajuba District (KZN) which is a clear outlier and further investigation of the single hospital in the district is required. The lowest ratios were found in the districts of JT Gaetsewe (NC) at 0.5 and in Nelson Mandela Bay (EC) at 0.6.

The average national OPD new client not referred rate was 64.1%. At district level, the highest rate was in Frances Baard (NC) with 94.9% and the lowest was in Dr Kenneth Kaunda (NW) with 6.1%. There are no distinct provincial patterns. There are no values for the Western Cape for the ratio of ambulatory to inpatient days.

Overall, the proportion of under-18 deliveries in facilities is declining, having steadily dropped from 9.2% in 2007/08 to 7.7% in 2012/13. Provincially, the highest proportion of 2012/13 under-18 deliveries was in the Eastern Cape (10.3%) and the lowest was in Gauteng (4.8%). With the exception of the Northern Cape, which reports a slight increase to 10.2%, the rates are stable or declining. An overview of annual trends for the provinces shows that in Gauteng, there is a strong downward trend. This is less marked in the other provinces, where certain districts show fluctuating trends.

The national Caesarean section rate has increased steadily from 12.7% in 2001/02 to 20.8% in 2012/13. Considerable variation exists between the provinces, with Caesarean section rates ranging from 13.3% in the Northern Cape to 27.0% in KwaZulu-Natal. The Northern Cape showed a decrease from 13.7 to 13.3% in contrast to the rest of the provinces where the rate increased.

a i.e. adjusted for inflation and reported in 2012/13 prices.

The stillbirth rate for SA was 21.8 per 1 000 births, representing a slight decrease from the 2011/12 rate of 22.5. This is the lowest rate since 2001/02. The greatest decline was in the Free State (from 29.1 to 25.1). The rate increased in Limpopo, Mpumalanga and the Northern Cape, with the latter having the highest rate overall at 25.3.

The antenatal care coverage before 20 weeks in SA has been far from optimal, although this has increased steadily from 31.4% in 2007/08 to 44.0% in 2012/13.

The 2011 National Antenatal Sero-prevalence Survey and the District Health Information System data on antenatal clients who were known to be HIV-positive at their first antenatal visit are used to report HIV prevalence among antenatal clients. The national average for facility antenatal HIV prevalence from the DHIS in 2012/13 was 27.3%, which is slightly lower than the 2011 Antenatal Survey finding of 29.5%. The national average for antenatal client initiated on ART in 2012/13 was 81.6%. Only 19 districts have reached the target of 85% set by the NDoH.

The national early infant diagnosis (EID) coverage during 2012/13, using National Health Laboratory Services (NHLS) data, was 73.9%, ranging from 61.1% in North West Province to 86.7% in Gauteng. Gauteng has had the highest EID coverage of all provinces for the past three years. KwaZulu-Natal had the second highest EID coverage in 2012/13 (78.6%).

The NHLS data for early mother-to-child transmission (MTCT) of HIV was 2.4% in 2012/13. The Western Cape was the best performing province with an early transmission rate below 2.0% in all six districts. All districts in Gauteng, KwaZulu-Natal, Mpumalanga and North West provinces achieved early vertical transmission rates below the target of 3.0%. The DHIS data for early MTCT was 2.5% during 2012/13.

The immunisation coverage in the country for 2012/13 was 94.0%, which is fairly similar to the 2011/12 level of 95.2%. The coverage in 2012/13 differs between the provinces, ranging from 82.6% in the Eastern Cape and 83.0% in Mpumalanga to 107.9% in Gauteng.

The national measles 1st to 2nd drop-out rate for 2012/13 was 17.0%, an increase from 2011/12 when it was 15.4%. Of concern is that the drop-out rate has been increasing since 2009/10 when it was 8.9%. It is difficult to determine whether this is due to variable service delivery or poor data quality, or a combination of both factors. From a provincial perspective, the drop-out rate ranges from a low of 10.4% in KwaZulu-Natal to a high of 23.1% in the Western Cape.

The annual vitamin A coverage in 2012/13 declined to 42.8% from the 2011/12 level of 43.4%. The national average remains slightly above the 2012/13 target of 42%. The variation in coverage among provinces ranged from a low of 35.8% in the North West to a high of 49.9% in the Free State.

In 2012/13, the average incidence of diarrhoea with dehydration in children under 5 years in South Africa was 12.0 episodes per 1 000 children under five years. This was lower than the 2011/12 figure of 14.0 episodes and continued the downward trend evident since a peak incidence of 21.1 episodes per 1 000 children in 2009/10. The provincial incidence varied from a low of 7.7 episodes in North West to a high of 16.8 episodes in the Western Cape. Only the Free State and Northern Cape provinces had an increase in incidence from 2011/12.

The average case fatality rate for diarrhoea with dehydration in children under five years in SA was 4.3% in 2012/13. This rate reflects a sustained trend of decrease since 2007/08 when the rate was 8.9%. The diarrhoea case fatality rate declined in seven provinces; in KwaZulu-Natal, it was static at 4.3%, and in the North West Province it increased by 0.9 percentage points from 4.9% in 2011/12 to 5.8% in 2012/13. There was a weak negative correlation between the incidence of diarrhoea and the case fatality rates for diarrhoea in children under five years.

The average incidence of pneumonia in children under 5 years in the country was 66.8 cases per 1 000 children under 5 years in 2012/13, which continued the downward trend from a peak incidence of 97.4 cases per 1 000 children under 5 years in 2009. The provincial incidence varied from a low of 30.8 cases in Mpumalanga, to a high of 119.0 cases in KwaZulu-Natal. All provinces showed a decline in incidence. There is little correlation between pneumococcal conjugate vaccine (PCV) coverage rates and the incidence of pneumonia in children under five years.

In 2012/13, the average case fatality rate for pneumonia in children under 5 years in SA was 3.8%, which continued the downward trend evident since 2009/10 when it was 6.6%. Whilst no data are available for the Western Cape for 2012/13, the national figure spans a range from 2.3% in Gauteng to 5.3% in Mpumalanga. Although the pneumonia case fatality rate declined in six provinces, it increased by 1.6 percentage points in the Northern Cape, from 2.8% in 2011/12 to 4.4% in 2012/13. The greatest decline occurred in the Free State, where it fell by 7.1 percentage points from 10.6% in 2010/11 to 3.5% in 2012/13. Four provinces, the Eastern Cape, Gauteng, KwaZulu-Natal and Limpopo, have experienced a reduction in the pneumonia case fatality rate every year since 2009/10.

The average incidence of severe acute malnutrition in children under 5 years in South Africa was 4.4 cases per 1 000 children under 5 years which, although up from the 2011/12 incidence of 4.3 cases per 1 000 children under 5 years, remains below the 2009/10 rate of 5.5. The incidence of severe acute malnutrition in the provinces ranged from a low of 2.5 cases in Gauteng to 7.2 cases in the Northern Cape. In Limpopo, the 2012/13 incidence continued the upward trend presented since 2009/10, when incidence of severe acute malnutrition measured 4.0 cases per 1 000 children under 5 years. Three other

provinces, the Eastern Cape, Mpumalanga and the Northern Cape, also had an increased incidence in 2012/13, reversing the falling trend evident in these provinces since 2009/10.

The average case fatality rate for severe acute malnutrition in children under 5 years in South Africa for the 2012/13 period was 12.7%. This was down from the previous year's rate of 13.3%, which continued the descending trend from 19.3% in 2009/10. The provincial figures for the 2012/13 period, excluding those for the Western Cape (for which no data are available), ranged between 8.4% in the Northern Cape and 18.5% in Limpopo. The case fatality rate rose in two provinces and fell in six provinces. The greatest fall, from 28.9% to 8.4%, occurred in the Northern Cape since 2009/10.

Overall, the couple year protection rate in SA has been low but has increased from 26.3 in 2002/03 to 37.8% in 2012/13. After being fairly static for a number of years, the couple year protection rate increased in all provinces from 2011/12 to 2012/13. The greatest increases were seen in the Western Cape, where the rate increased by 11.9 percentage points to 70.2%, and in KwaZulu-Natal, where it increased by 10.4 percentage points to 37.5%. The Western Cape is the best-performing province, with all six districts in the top nine districts nationally. The Western Cape couple year protection rate is 1.7-fold higher than the next highest province, which is Limpopo. The increase in the Eastern Cape was negligible from 31.2% to 31.3%. Gauteng Province is now the poorest-performing province, with the couple year protection rate at 28.3%.

The cervical screening rate in SA in 2012/13 was 55.4%, a marginal increase from 55.0% in 2011/12. This exceeds the NDoH target for cervical cancer screening coverage of 54%, as shown in the NDoH Annual Performance Plan for 2012/13. The increase in cervical screening coverage in KwaZulu-Natal over the past few years has continued to improve from 77.1% in 2011/12 to 81.8% in 2012/13. KZN remains the best-performing province. The Free State showed a substantial increase from 44.2% to 51.0%. The Eastern Cape showed a marginal increase (from 37.8% to 38.8%) as did the North West (from 48.8% to 49.0%). The rate has declined over the past two financial years since 2010/11 in Gauteng, Mpumalanga, Northern Cape and the Western Cape.

During 2012, a total of 349 594 cases of TB (all types) were recorded in the Electronic TB Register (ETR.Net). Of these, 119 901 were classified as new pulmonary TB smear-positive cases. The average case finding index for South Africa is 2.4%, varying from a high of 3.6% in the Eastern Cape to lows of 1.9% in Limpopo and 1.7% in Mpumalanga and the Western Cape. In 2012, the incidence rate (all TB) was 687.3 per 100 000 people. The average TB treatment success rate for the country has steadily improved from 68.8% in 2007 to 75.4% in 2011.

At a provincial level, the TB successful treatment rate (all TB) varied from highs of 81.5% in the Western Cape and 80.7% in Gauteng, to lows of 65.7% in Limpopo and 67.8% in the North West. The cure rate for new pulmonary smear-positive TB patients has increased over the last six years from 61.6% in 2006 to 74.2% in 2011. The cure rate in all provinces improved over the last year, except in the Northern Cape where the rate dropped from 70.7% in 2010 to 68.3% in 2011. The national TB defaulter rate (new pulmonary smear-positive) for 2011 was 6.1%, just short of the 6.0% target, and has declined from 7.1% in 2009 and 6.8% in 2010. In four provinces in particular – Gauteng, KwaZulu-Natal, Limpopo and Mpumalanga – the defaulter rate has improved over the last year.

The total number of condoms distributed through health facilities in South Africa was approximately 387 million in 2012/13, compared to the 272 million distributed in 2011/12. This represents an increase of about 40%. On average, 22.1 male condoms were distributed per male 15 years and older in 2012/13. This is almost four-and-a-half times that of the base rate of 4.6 in 2000/01. The Western Cape had the largest condom distribution rate of 56.1 per male, which was an almost 20% increase from the 2011/12 rate of 45.7. The provinces with the lowest condom distribution rates were the Northern Cape and Gauteng with average rates of 8.0 and 10.3 respectively. KwaZulu-Natal and North West provinces reported the most significant increases, from 11.1 and 6.0 in 2011/12 to 25.9 and 17.7 in 2012/13 respectively.

The total number of South African adults who had remained on ART at the end of the month increased by about 33%, from 1 439 445 in 2011/12 to 2 161 170 in 2012/13. All provinces demonstrated an increase. Mpumalanga reported an increase of more than 50%, from 127 458 in 2011/12 to 199 538 in 2012/13. Of all the provinces in SA, Gauteng made the most notable progress and has increased the number of adults on ARVs by more than 100%, with 505 644 adults in 2012/13 compared to 246 295 in 2011/12. The Northern Cape had the lowest number of adults on ARVs, which is in line with their low prevalence rate and small population, but still showed an increase from 17 348 in 2011/12 to 23 377 in 2012/13. The total number of children under the age of 15 who remained on antiretroviral treatment at the end of 2012/13 was 148 342. KwaZulu-Natal and Gauteng had the most children on ART, as a result of their large populations and high HIV prevalence.

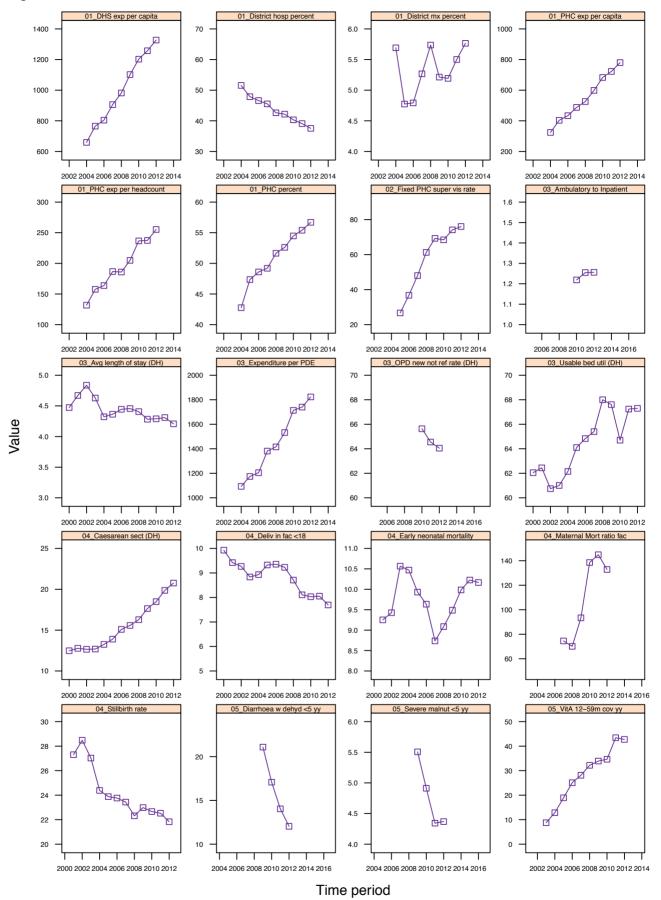
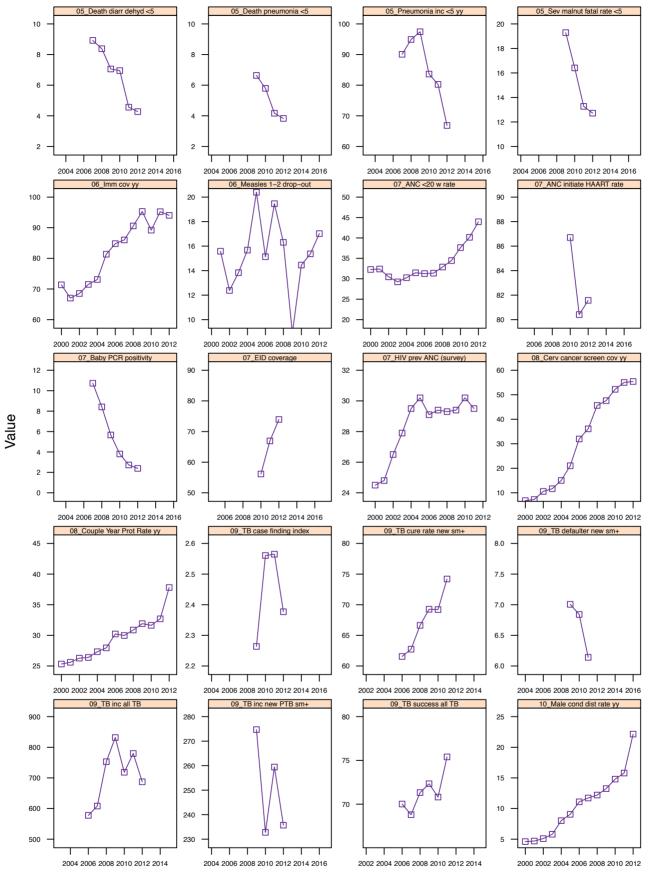


Figure 1: Annual indicators for South Africa



Time period

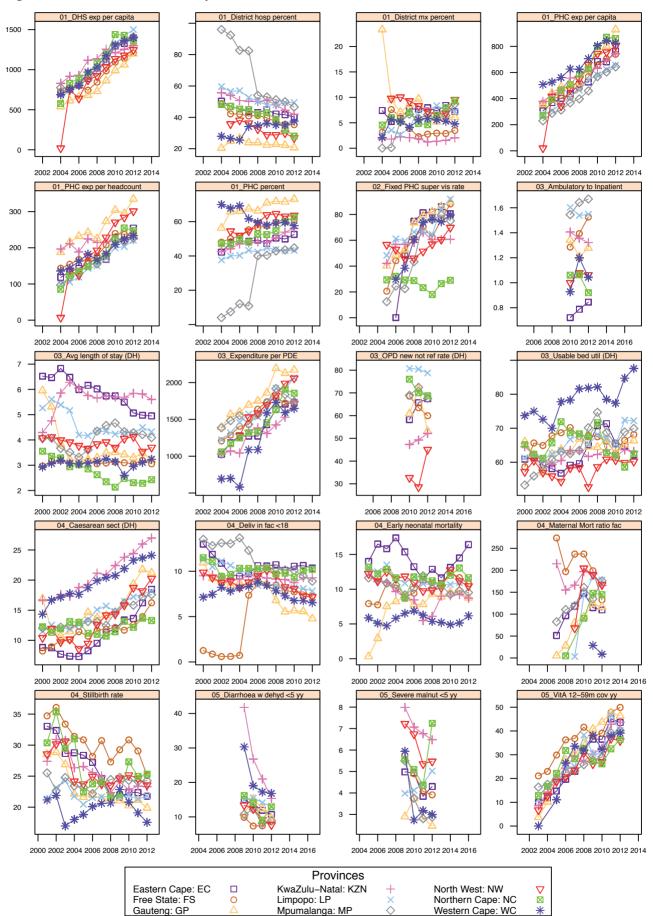
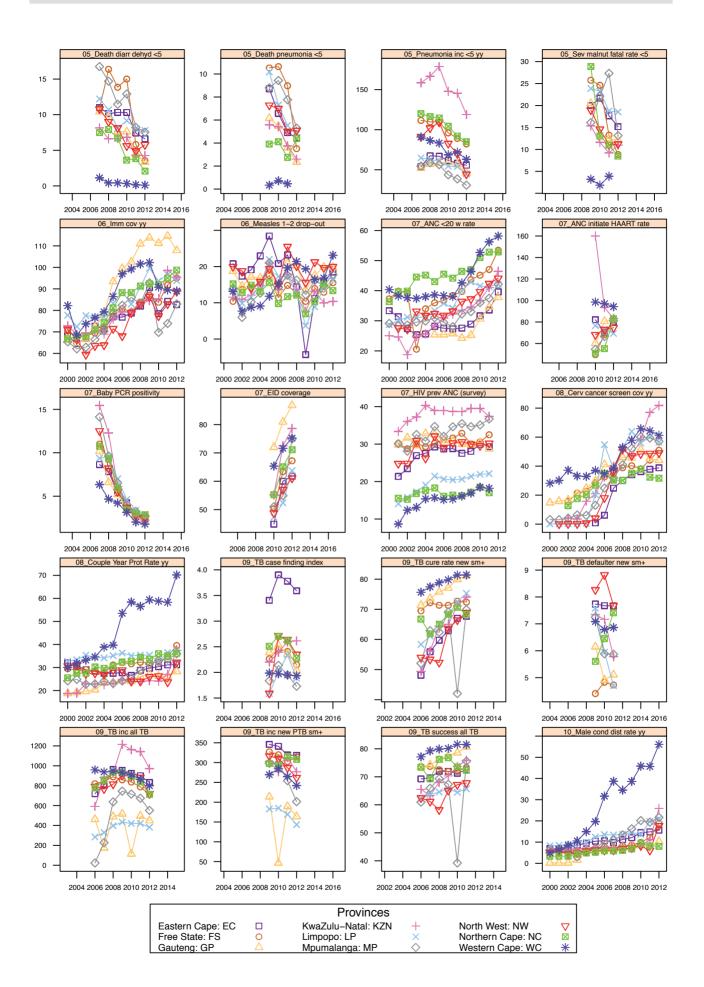
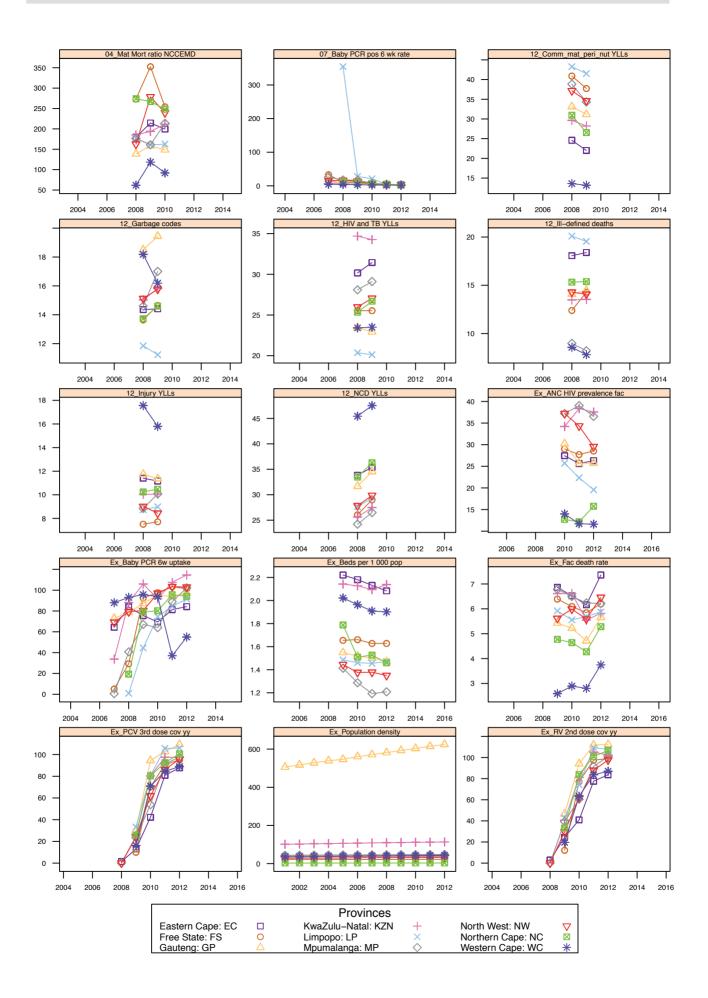


Figure 2: Annual indicators for provinces





# Table 1:Provincial pages, 2012/13

Province page: EC, Eastern Cape

				11041100	e page. EO, i		Year of Ind	Year					
Category	Indic	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	201
1_Finance	Percentage of DHS expenditure on district hospitals			50.4	47.0	45.4	43.7	43.1	44.8	42.2	41.7	40.2	
	Percentage of DHS expenditure on district management			7.4	5.3	5.9	7.8	7.6	8.0	7.3	8.4	7.2	
	Percentage of DHS expenditure on PHC			42.2	47.7	48.7	48.5	49.3	47.3	50.5	49.9	52.6	
	Provincial and LG expenditure on District Health			707.0	751.0	808.0	888.0	1,020.0	1,098.0	1.296.0	1,327.0	1.396.0	
	Services per capita (uninsured) Provincial expenditure per PHC headcount			118.2	134.2	143.1	156.1	171.0	168.1	228.4	220.0		
	Provincial PHC expenditure per capita												
02_Management	(uninsured)			306.0	369.0	402.0	437.0	509.0	527.0	684.0	682.0		
PHC	PHC supervisor visit rate (fixed clinic/CHC/CDC)					0.1	48.8	74.8	81.4	81.9	85.9	80.5	
03_Management Inpatients	Average length of stay (District Hospitals)	6.8	6.5	6.0	6.2	6.0	5.7	5.7	5.5	5.1	5.0	5.0	
	Expenditure per patient day equivalent (District Hospitals)			1,024.0	1,181.0	1,277.0	1,273.0	1,273.0	1,427.0	1,636.0	1,706.0	1,730.0	
	Inpatient bed utilisation rate (District Hospitals)	59.2	58.1	56.8	59.2	59.6	65.0	70.7	71.3	65.6	64.7	62.1	
	OPD new client not referred rate (District Hospitals)									58.3	65.7	67.4	
	Ratio Ambulatory to Inpatient days (District									0.7	0.8	0.9	
04_Delivery	Hospitals) Caesarean section rate (District Hospitals)	7.7	7.4	7.3	8.3	9.5	11.3	11.9	13.4	13.6	16.2		
04_Delivery													
	Delivery in facility under 18 years rate	10.9	9.6	9.5	9.7	10.6	10.6	10.7	10.1	10.6	10.6		
	Inpatient early neonatal death rate	16.5	15.8	17.4	15.4	13.2	11.4	12.9	11.6	13.2	14.5	16.4	
	Maternal mortality in facility ratio						51.2	96.4	117.8	147.9	114.9	109.5	
	Maternal mortality ratio institutional							179.4	214.5	199.5			
	Stillbirth rate in facility	32.4	28.6	28.8	28.4	27.2	24.6	21.9	21.6	22.4	22.3	21.8	
05_Child Health	Child under 5 years diarrhoea case fatality rate						11.0	10.2	10.3	10.3	7.4	6.6	
	Child under 5 years diarrhoea with dehydration								15.0	13.5	11.9	10.7	
	incidence Child under 5 years pneumonia case fatality rate								8.7	6.6	4.9		
							<b>FO O</b>						
	Child under 5 years pneumonia incidence Child under 5 years severe acute malnutrition						53.9	67.4	66.8	61.6	58.2		
	case fatality rate								20.0	21.7	17.7	15.2	
	Child under 5 years severe acute malnutrition incidence								5.0	4.9	3.8	4.3	
	Vitamin A coverage 12 to 59 months		9.9	11.8	14.7	19.7	23.0	31.6	36.6	36.5	45.1	43.6	
06_Immunisation	Immunisation coverage under 1 year	67.0	72.7	71.3	77.0	76.8	78.7	82.0	90.6	78.5	84.2	82.6	
	Immunisation coverage under 1 year - adjusted										76.7		
	Measles 1st to 2nd drop-out rate	17.3	19.1	22.9	28.4	20.8	23.2	14.4	-4.3	11.2	16.0	43.6       .2     82.6       .7        .0     18.5       .4     80.5       .6     39.6       .0     61.8	
07_PMTCT	Antenatal client initiated on ART rate									82.1	70.4		
		07.4	05.4	05.0	00.4	07.5	07.0	07.0	20.0				
	Antenatal visits before 20 weeks rate	27.4	25.4	25.6	28.1	27.5	27.3	27.6	28.9	31.7	33.6		
	Early infant HIV diagnosis coverage									44.9	60.0	61.8	
	HIV prevalence among antenatal clients (survey)	23.4	26.9	27.6	29.2	28.7	28.8	27.5	28.1	29.9	29.3		
	Infant 1st PCR test positive around 6 weeks rat						13.1	9.8	9.7	6.7	3.9	3.0	
	Percentage PCR tests under 2 months positive						8.6	7.8	5.4	4.2	2.9	2.6	
08_Reproductive	Cervical cancer screening coverage (annualised)				0.8	6.1	24.8	30.1	34.0	36.2	37.8	38.8	
health	Couple year protection rate (annualised)	29.1	28.3	27.5	27.5	27.8	26.6	28.8	29.7	30.4	31.2	31.3	
09_TB_CF	Incidence (diagnosed cases) of TB - all types					721.0	807.0	963.0	953.0	922.0	900.0	832.0	
	Incidence (diagnosed cases) of TB - new PTB								345.9	341.1	319.1	318.3	
	sm+ Number of TB cases reported (new PTB sm+)								23,000.0	22,706.0	21,236.0		
												52.6 1.398.0 254.7 764.0 80.5 5.0 1.730.0 62.1 67.4 103.5 10.3 16.4 109.5 21.8 21.8 2.1 4.3 10.7 2.1 4.3 3.0 15.2 4.3 4.3 6.6 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2 4.3 15.2	
	TB case finding index								3.4	3.9	3.8	3.6	
09_TB_TO	TB cure rate (new sm+)					48.1	55.9	59.7	62.9	67.0	67.7		
	TB defaulter rate (new sm+)								7.7	7.7	7.7		
	TB successful treatment rate (all TB)					69.3	69.6	72.0	71.9	71.3	72.5		
10_HIV	Adult remaining on ART at end of the month - total										148,997.0	176,590.0	222,10
	Child under 15 years remaining on ART at end of the month - total										9,729.0	11,954.0	15,76
	Male condom distribution rate	7.3	8.5	9.5	10.4	10.7	9.8	11.2	12.1	14.5	14.8	15.7	
11_Socio-demogr											29.4		
units	Medical scheme coverage (ave)								11.4		20.4		
	Percentage of people without piped water in								11.4				
	dwelling or within 200m										36.6		
12_Burden of disease	Percentage of deaths garbage codes							14.4	14.4				
	Percentage of deaths ill-defined							18.1	18.4				
	Percentage of Years of Life Lost (YLL) due to HIV and TB							30.2	31.4				
	Percentage of Years of Life Lost (YLL) due to injuries							11.4	11.2				
	Percentage of Years of Life Lost (YLL) due to							33.8	35.4				
	non-communicable diseases Percentage of YLLs due to communicable,							24.6	22.0				
r	maternal, perinatal, nutrition causes							24.0	22.0				
Extra	Antenatal client HIV prevalence in facility									27.4	25.6	26.3	
	Area (km2)										168,966.0		
	Baby initiated on HAART under 18 months rate									40.8	35.9		
	Baby PCR test around 6 weeks uptake rate						64.3	84.0	75.6	69.5	81.4	84.2	
	Facility crude death rate								6.9	6.5	6.2	7.4	
	PCV 3rd dose coverage (annualised)							1.4	13.0	42.2	80.9	87.7	
			38.7	38.8	38.9	39.0	39.1	39.3	39.3	39.4	39.4	39.5	
	Population density				50.9	00.0	38.1	38.3	38.3	39.4	39.4	39.5	
	Population density	38.6	30.7								0 500 050 /		
	Population total (Census)	38.6	36.7								6,562,053.0		
		38.6	36.7								6,562,053.0 6,654,852.0	6,671,956.0	
	Population total (Census)	38.6	36.7									6,671,956.0	
	Population total (Census) Population total (DHIS)	38.6	36.1								6,654,852.0	6,671,956.0	
	Population total (Census) Population total (DHIS) Population under 1 year (Census)	38.6	36.7					2.9	24.3	40.9	6,654,852.0 145,067.0	6,671,956.0 83.7	
	Population total (Census) Population total (DHIS) Population under 1 year (Census) Population under 1 year (DHIS)	38.6	36.7					2.9	24.3	40.9	6,654,852.0 145,067.0 133,057.0		

Province page: FS, Free State

				Provin	ice page: FS	, Free State							
Category	Indic	2002	2003	2004	2005	2006	Year of Ind 2007	Year 2008	2009	2010	2011	2012	2013
01_Finance	Percentage of DHS expenditure on district	2002	2003	48.8	42.2	42.1	40.9	41.2	39.7	37.3	35.5	35.4	2010
	hospitals Percentage of DHS expenditure on district			3.1	7.6	6.2	3.9	2.3	2.8		2.9	3.5	
	management									3.0			
	Percentage of DHS expenditure on PHC Provincial and LG expenditure on District Health			48.1	50.2	51.7	55.3	56.5	57.6	59.7	61.6	61.1	
	Services per capita (uninsured)			726.0	765.0	801.0	744.0	845.0	987.0	1,096.0	1,144.0	1,207.0	
	Provincial expenditure per PHC headcount			143.7	154.5	167.7	164.1	177.4	208.0	239.7	237.3	239.6	
	Provincial PHC expenditure per capita (uninsured)			365.0	393.0	423.0	412.0	481.0	568.0	656.0	705.0	740.0	
02_Management PHC	PHC supervisor visit rate (fixed clinic/CHC/CDC)				20.6	44.2	52.0	61.3	70.4	62.3	75.9	88.2	
03_Management	Average length of stay (District Hospitals)	3.2	3.1	3.0	3.2	3.1	3.1	3.1	3.1	3.1	3.2	3.1	
Inpatients	Expenditure per patient day equivalent (District			1,208.0	1,286.0	1,407.0	1,432.0	1,639.0	1,740.0	1,796.0	1,724.0	1,714.0	
	Hospitals) Inpatient bed utilisation rate (District Hospitals)	64.9	67.8	68.7	70.2	67.6	67.9	67.5	66.2	62.6	66.5		
	OPD new client not referred rate (District	01.0	01.0	00.1	10.2	01.0	01.0	01.0	00.2	68.6	63.5		
	Hospitals) Ratio Ambulatory to Inpatient days (District												
	Hospitals)									1.3	1.4		
04_Delivery	Caesarean section rate (District Hospitals)	10.0	10.1	11.4	10.7	11.6	11.8	12.1	11.7	12.6	13.9	16.2	
	Delivery in facility under 18 years rate	0.6	0.6	0.7	7.4	8.6	8.5	8.5	7.9	7.7	7.7	7.3	
	Inpatient early neonatal death rate	7.8	10.8	10.2	8.8	9.4	11.3	10.9	10.8	12.4	11.7	10.8	
	Maternal mortality in facility ratio						273.8	197.1	237.2	237.2	199.1	132.7	
	Maternal mortality ratio institutional							273.2	352.7	254.2			
	Stillbirth rate in facility	36.1	33.4	31.4	30.9	28.2	30.7	27.3	29.3	30.9	29.1	25.1	
05_Child Health	Child under 5 years diarrhoea case fatality rate						10.8	16.4	13.9	15.0	5.8		
us_onilio riediti	Child under 5 years diarrhoea case fatality rate Child under 5 years diarrhoea with dehydration						10.0	10.4					
	incidence								9.9	7.4	7.5		
	Child under 5 years pneumonia case fatality rate								10.5	10.6	9.0	3.5	
	Child under 5 years pneumonia incidence						111.6	109.8	110.0	96.1	89.3	82.3	
	Child under 5 years severe acute malnutrition case fatality rate								25.8	24.6	13.3	8.8	
	Child under 5 years severe acute malnutrition incidence								5.8	4.9	4.1	3.9	
	Vitamin A coverage 12 to 59 months		21.1	23.0	29.9	36.3	36.8	41.6	38.0	39.1	47.9	49.9	
06_Immunisation	Immunisation coverage under 1 year	68.2	69.5	72.1	79.2	80.8	79.4	83.9	87.0	83.8	91.9	95.1	
	Immunisation coverage under 1 year - adjusted										87.3		
	Measles 1st to 2nd drop-out rate	13.7	14.3	15.3	17.5	11.4	14.8	12.6	10.4	13.9	12.9	15.5	
		13.7	14.5	15.5	17.5	11.4	14.0	12.0	10.4				
07_PMTCT	Antenatal client initiated on ART rate									49.6	68.4		
	Antenatal visits before 20 weeks rate	39.3	20.6	34.0	36.0	36.7	38.4	39.8	43.7	45.2	47.1	0     1,714.0       5     680.2       5     60.0       4     1,5       9     16.2       7     7.3       8     132.7       1     225.1       3     3.6       5     9.2       3     8.8       1     25.1       3     8.2       3     8.2       4     9.5       5     9.2       6     9.2       7     3.5       6     2.5       7     2.5       2     5.1.0       7     3.9.6       2     7.0.0       7     3.4.1       10     9.240.0       4     2.2       4     2.2       4     2.2       4     2.2       5     3.14.1       10     9.240.0       14     2.2       4     2.2       5     3.14.1       10     9.240.0       14     2.2       15     3.14.1       10     9.240.0       12     18.9       4     3.14.1       10     1.410.0       12     18.9 <td></td>	
	Early infant HIV diagnosis coverage									50.3	63.4		
	HIV prevalence among antenatal clients (survey)	28.8	30.1	29.3	30.3	31.1	31.6	32.9	30.1	30.6	32.5		
	Infant 1st PCR test positive around 6 weeks rat						33.1	11.4	7.3	6.2	3.0	2.3	
	Percentage PCR tests under 2 months positive						11.0	9.2	5.7	4.1	2.6	2.5	
08_Reproductive	Cervical cancer screening coverage (annualised)	15.7	21.4	22.6	28.5	32.6	35.0	38.9	40.3	38.1	44.2	51.0	
health	Couple year protection rate (annualised)	29.1	28.5	27.8	31.1	32.2	31.6	32.3	32.0	32.4	34.7	39.6	
00 TR CE	Incidence (diagnosed cases) of TB - all types					820.0	844.0	890.0	860.0	837.0	788.0		
09_TB_CF	Incidence (diagnosed cases) of TB - an types					820.0	844.0	890.0					
	sm+								327.3	320.0	302.7		
	Number of TB cases reported (new PTB sm+)								9,500.0	9,337.0	8,869.0	29         15.5           34         82.1           3.4         82.1           7.1         53.5           3.4         67.2           2.5	
	TB case finding index								2.3	2.4	2.4	2.2	
09_TB_TO	TB cure rate (new sm+)					69.5	72.2	71.4	71.3	72.7	72.4		
	TB defaulter rate (new sm+)								4.4	4.8	4.7		
	TB successful treatment rate (all TB)					73.6	73.7	72.6	71.9	72.0	73.3		
10_HIV	Adult remaining on ART at end of the month -										6,253.0	19.833.0	124,221.
-	total Child under 15 years remaining on ART at end										227.0		7,846.
	of the month - total									9.9			1,040.
	Male condom distribution rate	5.0	5.3	5.9	7.0	7.7	7.1	8.3	8.6	9.9	12.2	18.9	
11_Socio-demogr											24.4		
	Medical scheme coverage (ave)								18.0				
	Percentage of people without piped water in dwelling or within 200m										4.6		
12_Burden of disease	Percentage of deaths garbage codes							13.6	14.6				
000000	Percentage of deaths ill-defined							12.4	14.3				
	Percentage of Years of Life Lost (YLL) due to HIV and TB							25.5	25.5				
	Percentage of Years of Life Lost (YLL) due to							7.5	7.7				
	injuries Percentage of Years of Life Lost (YLL) due to							26.1	29.0				
	non-communicable diseases Percentage of YLLs due to communicable,												
	maternal, perinatal, nutrition causes							40.9	37.7				
Extra	Antenatal client HIV prevalence in facility									29.0	27.7	28.6	
	Area (km2)										129,825.0		
	Baby initiated on HAART under 18 months rate									36.3	55.8		
	Baby PCR test around 6 weeks uptake rate						5.1	29.4	92.5	97.6	103.4	101.2	
	Facility crude death rate								6.4	6.1	5.8	6.2	
	PCV 3rd dose coverage (annualised)								10.0	70.2	90.8	95.0	
	Population density	21.4	21.5	21.7	21.8	21.9	22.1	22.2	22.4	22.5	22.6	22.7	
		21.4	21.5	21.7	21.8	21.9	22.1	22.2	22.4	22.5		22.1	
	Population total (Census)										2,745,590.0		
	Population total (DHIS)										2,930,369.0	2,941,282.0	
	Population under 1 year (Census)										58,976.0		
	Population under 1 year (DHIS)										56,524.0		
	RV 2nd dose coverage (annualised)								12.2	77.1	97.6	99.0	
									1.7	1.7	1.6	1.6	
	Usable beds per 1 000 population												

### **Section B: Profile South Africa**

					nce page: GF	5	Year of Ind	/ear					
Category	Indic	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	201
1_Finance	Percentage of DHS expenditure on district hospitals			20.3	24.7	26.7	24.0	23.9	22.4	22.9	22.3	20.7	
	Percentage of DHS expenditure on district			23.3	9.5	7.1	8.6	9.7	6.6	5.2	6.1	6.1	
	management Percentage of DHS expenditure on PHC			56.3	65.8	66.2	67.5	66.4	71.0	71.8	71.6		
	Provincial and LG expenditure on District Health			540.0	613.0	664.0	683.0	730.0	863.0	990.0	1,062.0	6.1         73.2         1,199.0         334.8         928.0         89.7         32         2,172.0         66.3         532         1.3         212         4.8         8.8         1165         129         3.3         9.8         1.9.9         3.3         9.8         1.2,1         2.5         12,1         2.5         46.3         107.9         19.8         8.8,0         3.7,8         8.6,7         2.4         2.2         4.4.1         2.8         4.4.2         2.4         4.2.3         4.48,0         18,591,0         2.0	
	Services per capita (uninsured)												
	Provincial expenditure per PHC headcount Provincial PHC expenditure per capita			187.5	216.0	232.0	242.5	225.3	273.1	304.4	295.1	20.7 6.1 7.3.2 1,190.0 89.7 3.3.4 22.0 2.172.0 66.3 5.3.2 1.3 2.172.0 4.8 8.8 116.5 1.2 4.8 116.5 1.2 4.8 1.5 1.2 1.3 2.172.0 4.8 8.8 1.5 1.2 1.5 4.6 3.3 9.6 3.5 7.7 9.7 9.7 9.7 9.7 9.7 9.7 9.7	
	(uninsured)			355.0	443.0	491.0	496.0	520.0	651.0	756.0	803.0	928.0	
2_Management PHC	PHC supervisor visit rate (fixed clinic/CHC/CDC)				40.2	48.6	52.7	73.7	79.3	82.2	86.2	89.7	
3_Management	Average length of stay (District Hospitals)	3.8	3.2	3.2	3.2	3.3	3.5	3.5	3.4	3.3	3.5	3.2	
npauents	Expenditure per patient day equivalent (District Hospitals)			1,391.0	1,569.0	1,599.0	1,695.0	1,753.0	1,859.0	2,191.0	2,127.0	2,172.0	
	Inpatient bed utilisation rate (District Hospitals)	57.0	62.5	63.8	63.0	66.8	64.6	64.4	66.5	62.6	65.2	66.3	
	OPD new client not referred rate (District									60.9	71.5		
	Hospitals) Ratio Ambulatory to Inpatient days (District												
	Hospitals)									1.3	1.2		
4_Delivery	Caesarean section rate (District Hospitals)	10.7	11.5	12.9	14.6	13.7	14.2	14.7	16.2	19.3	21.8		
	Delivery in facility under 18 years rate	8.9	8.4	8.7	8.4	9.1	8.7	6.8	5.5	5.7	5.6	4.8	
	Inpatient early neonatal death rate	2.9	7.6	8.2	8.9	7.8	7.8	9.3	8.9	9.6	9.7	8.8	
	Maternal mortality in facility ratio						5.2	27.8	80.0	93.8	123.3	116.5	
	Maternal mortality ratio institutional							138.6	158.4	148.6			
	Stillbirth rate in facility	28.8	26.9	22.1	21.6	22.0	21.3	21.4	21.1	20.3	21.2	19.9	
5_Child Health	Child under 5 years diarrhoea case fatality rate						10.4	9.6	7.6	7.6	4.5		
orma i reditti	Child under 5 years diarrhoea with dehydration						10.4	<i>a</i> .u					
	incidence								10.9	15.2	12.4		
	Child under 5 years pneumonia case fatality rate								6.2	5.5	3.6		
	Child under 5 years pneumonia incidence						52.1	56.9	58.3	59.3	56.6	45.5	
	Child under 5 years severe acute malnutrition case fatality rate								20.5	13.4	12.5	12.1	
	Child under 5 years severe acute malnutrition incidence								2.9	3.8	2.9	3348 9280 897 32 2,1720 663 632 103 488 88 105 1079 199 333 96 233 455 121 1079 455 463 1079 1079 108 1079 108 1079 108 1079 108 1079 108 1079 108 108 108 108 108 108 108 108 108 108	
	Vitamin A coverage 12 to 59 months		3.7	10.2	20.5	27.8	30.3	34.8	40.8	43.7	47.7		
6_Immunisation	Immunisation coverage under 1 year	66.5	72.2	78.4	93.4	99.5	102.6	111.0	113.7	111.3	114.6	107.9	
	Immunisation coverage under 1 year - adjusted										88.6		
					10.0					47.0			
	Measles 1st to 2nd drop-out rate	14.6	17.1	16.9	18.8	13.5	20.9	20.2	13.5	17.6	19.9		
7_PMTCT	Antenatal client initiated on ART rate									60.1	80.5	83.0	
	Antenatal visits before 20 weeks rate				25.4	25.4	25.8	24.3	25.2	30.6	34.6	37.8	
	Early infant HIV diagnosis coverage									72.0	80.9	86.7	
	HIV prevalence among antenatal clients (survey)	31.7	29.6	32.8	32.5	30.9	30.7	30.0	29.8	30.4	28.7		
	Infant 1st PCR test positive around 6 weeks rat						13.3	10.3	9.8	6.4	4.1	2.4	
	Percentage PCR tests under 2 months positive						10.1	6.6	5.2	3.4	2.6	2.2	
9 Banraduativa	Cervical cancer screening coverage	16.7	20.8	24.8	29.7	41.1	39.8	46.1	45.6	51.4	44.9		
8_Reproductive ealth	(annualised)												
	Couple year protection rate (annualised)	19.7	20.3	23.3	23.7	24.2	24.0	26.1	27.1	26.3	26.2		
9_TB_CF	Incidence (diagnosed cases) of TB - all types					462.0	174.0	489.0	517.0	114.0	496.0	448.0	
	Incidence (diagnosed cases) of TB - new PTB sm+								213.7	46.5	189.4	163.8	
	Number of TB cases reported (new PTB sm+)								23,022.0	5,105.0	21,170.0	18,591.0	
	TB case finding index								2.4	2.5	2.4	2.0	
9_TB_TO	TB cure rate (new sm+)					71.3	73.6	75.7	77.1	79.9	81.1		
	TB defaulter rate (new sm+)								6.1	4.9	5.1		
	TB successful treatment rate (all TB)					73.5	74.3	76.0	77.6	78.6	80.7		
a 110 <i>1</i>	TB successful treatment rate (all TB) Adult remaining on ART at end of the month -					13.5	/4.3	/0.0	//.6	/8.6			
0_HIV	total Child under 15 years remaining on ART at end										115,310.0		505,6
	of the month - total										891.0		28,5
	Male condom distribution rate	0.2	1.5	6.3	5.6	6.4	6.5	7.8	8.2	8.3	7.9	10.3	
1_Socio-demogr	Adults (18-65) no secondary schooling										12.9		
	Medical scheme coverage (ave)								26.6				
	Percentage of people without piped water in dwelling or within 200m										3.9		
2 Burden of	dwelling or within 200m Percentage of deaths garbage codes							18.5	19.4				
2_Burden or isease													
	Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to							14.1	14.5				
	HIV and TB							23.4	22.9				
	Percentage of Years of Life Lost (YLL) due to injuries							11.7	11.4				
	Percentage of Years of Life Lost (YLL) due to non-communicable diseases							31.7	34.5				
	Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes							33.1	31.2				
tra	Antenatal client HIV prevalence in facility									30.2	25.7	25.7	
	Area (km2)										18,178.0		
	Baby initiated on HAART under 18 months rate									51.4	54.0		
							-		ar -				
	Baby PCR test around 6 weeks uptake rate						73.1	78.5	87.2	95.6	93.6	97.3	
	Facility crude death rate								5.4	5.2	4.7	5.7	
	PCV 3rd dose coverage (annualised)								30.1	94.5	102.8	109.3	
	Population density	517.3	528.4	539.0	546.5	560.7	570.8	581.6	592.7	603.6	614.9	624.2	
	Population total (Census)										12,272,263.0		
	Population total (DHIS)										11,177,946.0	11,347,393.0	
												11,347,383.0	
	Population under 1 year (Census)										255,863.0		
	Population under 1 year (DHIS)										197,043.0		
	DV And data server								40.0				

46.6

94.1

111.8

1.6 1.5 1.5 1.5

112.4

### 230

RV 2nd dose coverage (annualised)

Usable beds per 1 000 population

Province page: KZN, KwaZulu-Natal

				Province	page: KZN,	KwaZulu-Na							
Category	Indic	2002	2003	2004	2005	2006	Year of Ind Y 2007	2008 2008	2009	2010	2011	2012	201
01_Finance	Percentage of DHS expenditure on district hospitals			55.7	54.0	50.7	50.3	50.0	50.8	48.0	44.5	41.9	
	Percentage of DHS expenditure on district			1.8	1.8	2.2	2.1	1.9	1.2	1.4	1.6	2.1	
	management Percentage of DHS expenditure on PHC			42.5	44.2	47.0	47.7	48.1	48.0	50.6	53.9		
	Provincial and LG expenditure on District Health												
	Services per capita (uninsured)			830.0	917.0	930.0	1,119.0	1,140.0	1,256.0	1,210.0	1,254.0		
	Provincial expenditure per PHC headcount Provincial PHC expenditure per capita			196.5	211.5	188.4	224.6	214.1	216.0	221.2	220.1		
	(uninsured)			378.0	432.0	462.0	557.0	573.0	615.0	632.0	694.0	744.0	
02_Management PHC	PHC supervisor visit rate (fixed clinic/CHC/CDC)				42.0	56.8	56.9	58.1	66.2	60.4	60.5	60.8	
03_Management Inpatients	Average length of stay (District Hospitals)	5.9	6.3	6.1	5.8	5.7	5.7	5.7	5.7	5.9	5.8	5.6	
inpatients	Expenditure per patient day equivalent (District Hospitals)			1,028.0	1,070.0	1,042.0	1,348.0	1,383.0	1,310.0	1,426.0	1,530.0	1,734.0	
	Inpatient bed utilisation rate (District Hospitals)	60.4	59.4	60.5	63.5	63.4	61.7	62.3	63.7	61.7	63.7	63.2	
	OPD new client not referred rate (District									47.3	49.3	52.2	
	Hospitals) Ratio Ambulatory to Inpatient days (District									1.4	1.4	13	
04_Delivery	Hospitals) Caesarean section rate (District Hospitals)	17.6	17.3	18.8	19.3	21.1	20.9	22.4	23.8	24.4	26.0		
04_Delivery													
	Delivery in facility under 18 years rate	9.4	9.0	9.1	9.6	9.5	9.3	9.1	9.1	8.7	9.3		
	Inpatient early neonatal death rate	11.1	11.0	9.7	8.8	8.5	5.5	6.1	9.0	9.0	9.2	8.7	
	Maternal mortality in facility ratio						214.9	155.1	166.0	196.9	192.2	165.5	
	Maternal mortality ratio institutional							185.1	193.7	211.5			
	Stillbirth rate in facility	30.9	30.8	26.3	26.6	25.6	25.0	22.3	24.1	22.8	23.4	23.3	
05_Child Health	Child under 5 years diarrhoea case fatality rate						8.1	6.6	6.7	6.8	4.3	4.3	
	Child under 5 years diarrhoea with dehydration incidence								41.8	26.8	21.0	15.4	
	Incidence Child under 5 years pneumonia case fatality rate								5.6	5.4	3.8		
							158.6	166.7	178.8	147.8			
	Child under 5 years pneumonia incidence Child under 5 years severe acute malnutrition						108.6	100.7			145.5		
	case fatality rate Child under 5 years severe acute mainutrition								15.4	11.6	9.2		
	incidence								8.0	7.1	6.8	6.5	
	Vitamin A coverage 12 to 59 months		8.6	14.3	19.9	24.4	29.5	27.3	30.3	32.8	42.8	43.6	
06_Immunisation	Immunisation coverage under 1 year	69.5	70.0	69.0	76.0	79.3	79.2	83.1	84.6	85.4	98.6	<ul> <li>2.1</li> <li>560</li> <li>1,300</li> <li>2238</li> <li>744.0</li> <li>608</li> <li>546</li> <li>1,74.0</li> <li>632</li> <li>632</li> <li>632</li> <li>632</li> <li>632</li> <li>633</li> <li>740</li> <li>635</li> <li>740</li> <li>745</li> <li>744.0</li> <li>744.0<td></td></li></ul>	
	Immunisation coverage under 1 year - adjusted										89.5		
	Measles 1st to 2nd drop-out rate	11.0	12.1	14.7	20.9	13.7	17.8	13.7	7.7	13.1	10.0	0.5           0.0         10.4           3.6         83.2           1.0         46.4	
07_PMTCT	Antenatal client initiated on ART rate									160.0	93.6	83.2	
	Antenatal visits before 20 weeks rate	18.8	24.8	25.6	28.4	30.9	32.3	33.5	34.6	36.9	41.0	46.4	
	Early infant HIV diagnosis coverage	10.0	21.0	20.0	20.4	00.0	02.0	00.0	04.0	55.2	72.5		
		<b>aa i</b>										0 46.4 5 78.6 4 0 2.2	
	HIV prevalence among antenatal clients (survey)	36.1	37.3	40.3	38.9	38.9	38.7	38.7	39.5	39.5	37.4		
	Infant 1st PCR test positive around 6 weeks rat						6.7	5.9	10.1	6.8	4.0		
	Percentage PCR tests under 2 months positive						15.4	12.3	6.1	4.0	2.7	2.3	
08_Reproductive health	Cervical cancer screening coverage (annualised)	4.2	3.5	15.8	20.9	32.4	39.3	51.1	47.0	58.2	77.1	81.8	
	Couple year protection rate (annualised)	23.0	22.9	22.5	22.9	24.7	23.9	23.8	24.2	24.2	27.1	37.5	
09_TB_CF	Incidence (diagnosed cases) of TB - all types					592.0	881.0	928.0	1,215.0	1,162.0	1,142.0	971.0	
	Incidence (diagnosed cases) of TB - new PTB sm+								302.3	276.9	312.7	276.7	
	Number of TB cases reported (new PTB sm+)								31,589.0	29,191.0	33,217.0	3         9.3           2         8.7           2         185.5           3         4.3           0         15.4           8         2.6           5         119.0           2         11.0           8         2.6           6         95.4           5         7           6         8.3.2           0         10.4           6         8.3.2           0         10.4           6         7.8.6           7         2.2.3           1         8.1.8           1         3.7.5           0         2.76.7           0         2.76.7           1         3.7.5           0         2.76.7           1         3.7.5           1         3.7.5           1         2.76.7           1         2.76.7           1         2.76.7           1         3.7.5           1         3.7.5           1         3.7.5           3         3.7.5           3         3.7.5           4.5.32.0         <	
	TB case finding index								2.2	2.4	2.6		
09_TB_TO	TB cure rate (new sm+)					49.4	56.1	64.3	65.0	71.1	74.1		
03_10_10						43.4	50.1	04.5			74.1		
	TB defaulter rate (new sm+)								7.3	7.2	5.8		
	TB successful treatment rate (all TB) Adult remaining on ART at end of the month -					65.5	63.3	68.0	70.4	73.7	75.9		
10_HIV	total										410,885.0	514,752.0	672,544.
	Child under 15 years remaining on ART at end of the month - total										37,813.0	45,032.0	53,794
	Male condom distribution rate	6.5	6.9	7.1	7.5	7.9	7.4	8.2	8.2	8.2	11.1	25.9	
11_Socio-demogr	. Adults (18-65) no secondary schooling										24.0		
	Medical scheme coverage (ave)								12.5				
	Percentage of people without piped water in										25.1		
12_Burden of	dwelling or within 200m Percentage of deaths garbage codes							15.0	15.8				
disease	Percentage of deaths ill-defined												
	Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to							13.5	13.5				
	HIV and TB							34.7	34.3			2.1 56.0 1,300.0 223.8 744.0 60.8 5.6 1,734.0 6.32 1,33 6.32 1,33 7,7 1,65.5 1,23,3 1,54 1,10,0 1,10,	
	Percentage of Years of Life Lost (YLL) due to injuries							10.0	10.1				
	Percentage of Years of Life Lost (YLL) due to non-communicable diseases							25.6	27.5				
	Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes							29.6	28.2				
Extra	Antenatal client HIV prevalence in facility									34.2	38.4	37.5	
	Area (km2)										94,361.0		
	Baby initiated on HAART under 18 months rate									64.1	51.0		
	Baby PCR test around 6 weeks uptake rate						33.8	88.2	105.9	91.7	107.6	114.6	
							55.0						
	Facility crude death rate								6.6	6.6	5.5		
	PCV 3rd dose coverage (annualised)								25.4	80.3	97.5		
	Population density	102.6	103.9	105.1	106.2	107.4	108.5	109.7	110.7	111.7	112.6	113.4	
	Population total (Census)										10,267,300.0		
	Population total (DHIS)										10,622,198.0	10,703,918.0	
											237,444.0		
	Population under 1 year (Census)												
											216,239.0		
	Population under 1 year (DHIS)								40 G	£1.0	216,239.0	102.2	
									40.6	81.2		102.2	

### Section B: Profile South Africa

#### Province page: LP, Limpopo Year of IndYear Category Indic 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 Percentage of DHS expenditure on district hospitals Percentage of DHS expenditure on district management 50.2 01 Finance 59.6 56.5 57.0 52.7 47.9 47.9 49.3 49.4 2.7 3.6 2.7 4.0 7.5 7.3 8.4 7.5 7.2 Percentage of DHS expenditure on PHC 37.7 40.0 40.3 43.3 42.3 44.8 43 7 43.1 433 Provincial and LG expenditure on District Health Services per capita (uninsured) 718.0 854.0 943.0 1,090.0 1,327.0 1,501.0 741.0 1,204.0 1,425.0 Provincial expenditure per PHC he 100.3 105.4 118.6 142.8 150.1 171.0 200.0 203.3 220.6 Provincial PHC expenditure per capita (uninsured) 279.0 308.0 357.0 412.0 464.0 543.0 582.0 622.0 656.0 02\_Management PHC PHC supervisor visit rate (fixed clinic/CHC/CDC) 59.5 66.4 48.3 61.1 66.9 64.6 84.5 91.9 Average length of stay (District Hospitals) 4.2 4.2 4.4 4.3 4.2 4.3 4.3 4.5 4.3 5.4 5.2 03\_Management Inpatients Expenditure per patient day equivalent (District Hospitals) 1 224 0 1 318 0 1 458 0 1 571 0 1 533 0 1 664 0 1 926 0 1 913 0 2 065 0 65.2 68.1 65.2 72.4 72.2 Inpatient bed utilisation rate (District Hospitals) 60.6 62.5 63.4 66.7 67.8 66.9 OPD new client not referred rate (District Hospitals) 80.7 80.4 78.8 Ratio Ambu Hospitals) oulatory to Inpatient days (District 16 15 16 04 Delivery Caesarean section rate (District Hospitals) 12.0 11.9 12.7 13.4 15.1 15.7 14.8 16.5 17.2 17.7 18.1 Delivery in facility under 18 years rate 11.1 10.7 10.0 9.8 8.4 8.4 8.4 8.2 8.2 8.1 7.8 Inpatient early neonatal death rate 12.5 13.5 11.6 10.9 11.8 10.8 10.7 10.7 10.7 11.0 11.5 Maternal mortality in facility ratio 142.1 177.9 3.3 184.6 176.9 Maternal mortality ratio institutional 160.3 162.8 Stillbirth rate in facility 23.2 24.2 21.7 20.5 21.5 21.7 21.7 217 21.9 21.3 21.8 05 Child Health Child under 5 years diarrhoea case fatality rate 12.2 10.7 8 1 92 81 78 Child under 5 years diarrhoea with dehydration incidence 14.9 15.5 14.1 13.1 10.2 Child under 5 years pneumonia case fatality rate 7.3 5.5 4.8 44 8 Child under 5 years pneumonia incidence 64.9 62.6 60.9 54.6 53.9 Child under 5 years severe acute malnutrition case fatality rate Child under 5 years severe acute malnutrition incidence 23.9 23.3 18.7 18.5 4.0 4.1 44 5.0 Vitamin A coverage 12 to 59 months 11.1 17.0 20.0 24 7 25.1 38.3 30.6 30.3 46.8 40.2 90.9 96.7 Immunisation coverage under 1 year 77.5 77.1 76.8 83.2 88.5 82.9 99.6 93.7 93.8 06 Immunisation Immunisation coverage under 1 year - adjusted 72.1 Measles 1st to 2nd drop-out rate 9.9 11.6 14.9 22.0 17.3 17.2 12.7 3.7 89 14 1 16.2 07 PMTCT Antenatal client initiated on ART rate 76.6 73.1 69.4 Antenatal visits before 20 weeks rate 31.2 31.1 31.3 33.4 35.8 34.2 40.0 42.9 41.6 41.3 42.0 Early infant HIV diagnosis coverage 47 A 52.4 63.8 22.1 HIV prevalence among antenatal clients (survey) 17.2 19.1 20.4 20.6 21.4 21.9 15.8 21.5 20.7 Infant 1st PCR test positive around 6 weeks rai 354.4 27.9 21.1 4.2 2.4 Percentage PCR tests under 2 months positive 94 9.6 7.0 4.6 34 29 Cervical cancer screening coverage 08\_Reproductive health 0.3 0.4 0.4 20.4 54.8 38.2 52.5 63.9 55.9 60.1 56.5 (annua 36.3 35.2 35.4 35.4 32.7 37.3 Couple year protection rate (annualised) 35.4 34.4 34.2 35.1 36.5 09\_TB\_CF Incidence (diagnosed cases) of TB - all types 284 0 329.0 397.0 433.0 420.0 420.0 382.0 Incidence (diagnosed cases) of TB - new PTB sm+ 182.7 185.0 169.2 143.2 Number of TB cases reported (new PTB sm+) 7.567.0 9,553.0 9.711.0 8,903.0 TB case finding index 1.6 2.0 2.3 1.9 09 TB TO TB cure rate (new sm+) 58.3 61.1 65.2 68.0 72.6 75.3 TB defaulter rate (new sm+) 7.6 5.9 4.7 TB successful treatment rate (all TB) 62.2 63 7 64 6 65.7 64.5 65 7 Adult remaining on ART at end of the month 10 HIV 70 912 0 113 821 0 149 102 0 total Child under 15 years remaining on ART at end of the month - total 5.672.0 7.989.0 10,329.0 Male condom distribution rate 19.7 13.5 13.3 13.6 14.6 13.6 21.0 11 Socio-demogr Adults (18-65) no secondary schooling 25.1 Medical scheme coverage (ave) 8.7 Percentage of people without piped water in dwelling or within 200m 27.9 12\_Burden of Percentage of deaths garbage codes 11.8 11.2 Percentage of deaths ill-defined 20.1 19.5 Percentage of Years of Life Lost (YLL) due to HIV and TB 20.4 20.1 lage of Years of Life Lost (YLL) due to 87 9.0 Percentage of Years of Life Lost (YLL) due to non-communicable diseases Percent injuries 27.6 29.4 non-communicable diseases Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes 43.3 41.5 Extra Antenatal client HIV prevalence in facility 25.7 22.3 19.6 125,755.0 Area (km2) Baby initiated on HAART under 18 months rate 62.6 48.3 Baby PCR test around 6 weeks uptake rate 0.9 44.5 74.5 84.4 91.5 Facility crude death rate 5.9 5.6 5.7 5.9 PCV 3rd dose coverage (annualised) 33.2 80.8 105.6 106.0 Population density 41.6 41.7 41.8 42.0 41.1 41.4 Population total (Census) 5,404,868.0 Population total (DHIS) 5.261.983.0 5.282.562.0 Population under 1 year (Census) 141,124.0 Population under 1 year (DHIS) 105,452.0 RV 2nd dose coverage (annualised) 42.8 74.1 109.4 107.7

1.5

1.5

1.5

1.5

### 232

Usable beds per 1 000 population

Year of IndYear 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 Category Percentage of DHS expenditure on district hospitals Percentage of DHS expenditure on district management 92.4 01 Finance 96.0 82.8 82.4 54.0 53.0 51.3 50.0 46.6 0.0 0.1 5.1 6.7 5.9 5.8 6.5 8.7 6.6 Percentage of DHS expenditure on PHC 40 74 12 1 10.9 40.1 40.4 42.9 43.6 44 7 Provincial and LG expenditure on District Health Services per capita (uninsured) 775.0 759.0 826.0 872.0 972.0 1,135.0 1,293.0 1,359.0 1,411.0 Provincial expenditure per PHC headcount 97.1 119.4 129.6 154.7 155.7 179.6 222.6 218.1 227.0 Provincial PHC expenditure per capita 230.0 287.0 312.0 368.0 397.0 459.0 568.0 603.0 643.0 (uninsured) 02\_Management PHC PHC supervisor visit rate (fixed clinic/CHC/CDC) 12.4 24.5 74.4 75.8 79.7 75.1 22.5 43.4 Average length of stay (District Hospitals) 3.3 3.6 4.4 4.6 4.7 4.3 4.3 4.2 4.1 03\_Management 3.7 3.5 Expenditure per patient day equivalent (District Hospitals) 1 387 0 1 482 0 1 551 0 1 433 0 1 564 0 1 725 0 1 918 0 1 838 0 1 744 0 Inpatient bed utilisation rate (District Hospitals) 62.5 63.5 70.2 74.7 65.4 69.9 57.9 60.7 63.1 68.7 68.9 OPD new client not referred rate (District 68.9 72.4 67.6 Hospitals) Ratio Ambulatory to Inpatient days (District Hospitals) 15 16 17 04 Delivery Caesarean section rate (District Hospitals) 12.2 12.4 12.4 13.1 13.1 12.5 14.6 16.2 15.8 17.2 17.6 Delivery in facility under 18 years rate 13.1 13.0 13.7 12.3 10.0 10.2 10.3 10.1 10.1 9.5 8.9 Inpatient early neonatal death rate 11.5 10.0 10.6 92 10.1 11.9 10.1 10.6 0.2 0.8 95 Maternal mortality in facility ratio 161.1 82.6 110.3 119.0 135.0 175.8 Maternal mortality ratio institutional 176.6 161.0 213.9 Stillbirth rate in facility 22.6 24.8 23.4 23.2 22.2 23.9 24.5 24.8 24.3 24.1 24.3 05 Child Health Child under 5 years diarrhoea case fatality rate 16.8 14 7 11.5 12.9 82 76 Child under 5 years diarrhoea with dehydration incidence 10.7 12.2 8.2 8.8 Child under 5 years pneumonia case fatality rate 8.8 9.4 7.8 5.3 Child under 5 years pneumonia incidence 54 7 58.8 56.4 437 38.6 30.8 Child under 5 years severe acute malnutrition case fatality rate Child under 5 years severe acute malnutrition incidence 16.1 22.1 27.3 13.1 5.5 3.8 2.8 2.9 Vitamin A coverage 12 to 59 months 164 176 19.1 22.5 23.2 25.8 27.8 29.1 39.1 40.2 86.0 Immunisation coverage under 1 year 62.9 66.5 70.4 78.7 82.4 83.3 92.8 69.8 73.9 83.0 06 Immunisation Immunisation coverage under 1 year - adjust 61.0 Measles 1st to 2nd drop-out rate 6.0 10.3 12.7 21.0 14.3 17.6 16.3 12.3 16.2 14.7 17.8 07\_PMTCT Antenatal client initiated on ART rate 54.6 81.1 66.5 Antenatal visits before 20 weeks rate 28.6 29.6 31.0 29.5 28.1 32.3 33.0 36.0 37.5 42.2 29.9 Early infant HIV diagnosis coverage 51.0 54.9 74 9 36.7 HIV prevalence among antenatal clients (survey) 34.7 32.0 34.6 35.4 35.1 28.1 32.5 30.8 34.7 Infant 1st PCR test positive around 6 weeks rat 25.9 17.4 17.0 7.9 4.6 3.0 Percentage PCR tests under 2 months positive 14 1 9.6 65 40 32 2.7 Cervical cancer screening coverage (annualised) 13.0 31.8 08\_Reproductive health 4.0 6.3 6.0 24.8 40.9 52.2 60.2 59.3 57.1 24.2 25.3 33.0 33.7 Couple year protection rate (annualised) 22.7 22.9 24.0 23.1 28.8 31.6 35.9 09\_TB\_CF Incidence (diagnosed cases) of TB - all types 23.0 227.0 637.0 745.0 715.0 674.0 552.0 Incidence (diagnosed cases) of TB - new PTB sm+ 298.1 298.6 254.3 201.3 Number of TB cases reported (new PTB sm+) 10.751.0 10,854.0 9.313.0 7.428.0 TB case finding index 1.8 2.1 2.0 1.7 TB cure rate (new sm+) 69.1 09 TB TO 52.1 62.9 62.4 42.1 69.9 TB defaulter rate (new sm+) 7.2 5.9 5.9 TB successful treatment rate (all TB) 61.0 65.9 69.3 674 39.2 75.6 Adult remaining on ART at end of the month 10 HIV 24 437 0 127 458 0 199 538 0 total Child under 15 years remaining on ART at end of the month - total 2,116.0 8.752.0 12,501.0 Male condom distribution rate 13.4 19.4 10.3 10.9 16.3 20.2 21.6 11 Socio-demogr Adults (18-65) no secondary schooling 25.0 Medical scheme coverage (ave) 13.3 Percentage of people without piped water in dwelling or within 200m 19.6 12\_Burden of Percentage of deaths garbage codes 14.6 17.0 Percentage of deaths ill-defined 9.0 8.2 Percentage of Years of Life Lost (YLL) due to HIV and TB 28.1 29.1 HIV ano 1-2 Percentage of Years of Life Loss (1-2-injuries Percentage of Years of Life Lost (YLL) due to non-communicable diseases Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes tage of Years of Life Lost (YLL) due to 8.8 10.1 24.2 26.5 38.8 34.3 Extra 37.2 39.0 36.5 Area (km2) 76,495.0 Baby initiated on HAART under 18 months rate 213.2 130.4 Baby PCR test around 6 weeks uptake rate 0.6 40.8 67.1 64.0 88.9 102.2 Facility crude death rate 6.8 6.5 6.2 6.2 PCV 3rd dose coverage (annualised) 0.1 23.5 53.8 91.4 97.6 Population density 46.7 47.1 47.5 47.9 48.2 44.3 44.8 45.3 45.7 46.4 Population total (Census) 4,039,939.0 Population total (DHIS) 3,661,839.0 3.689.833.0 Population under 1 year (Census) 94,419.0 Population under 1 year (DHIS) 77,776.0 RV 2nd dose coverage (annualised) 0.1 39.3 60.6 91.6 101.1 Usable beds per 1 000 population 1.4 1.3 1.2 1.2

Province page: MP, Mpumalanga

### Section B: Profile South Africa

#### Province page: NC, Northern Cape Year of IndYear Category Indic 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 Percentage of DHS expenditure on district hospitals Percentage of DHS expenditure on district management 42.3 01 Finance 48.1 47.0 45.3 45.0 42.9 38.7 32.0 28.0 4.6 6.0 5.3 7.0 4.9 4.6 6.5 8.0 9.3 Percentage of DHS expenditure on PHC 473 47.0 49.4 48 1 52.9 52.5 54 7 60.0 627 Provincial and LG expenditure on District Health Services per capita (uninsured) 577.0 893.0 1,354.0 831.0 959.0 1,091.0 1,194.0 1,440.0 1,429.0 Provincial expenditure per PHC he 85.1 123.4 135.0 147.7 164.1 182.7 224.6 255.0 247.9 Provincial PHC expenditure per capita (uninsured) 272.0 394.0 466.0 506.0 586.0 628.0 800.0 870.0 860.0 02\_Management PHC PHC supervisor visit rate (fixed clinic/CHC/CDC) 29.3 32.1 29.3 28.8 23.3 18.1 26.4 29.0 Average length of stay (District Hospitals) 3.0 2.9 2.6 2.3 2.1 2.5 2.3 2.3 2.4 3.3 2.9 03\_Management Inpatients Expenditure per patient day equivalent (District Hospitals) 1 057 0 1 171 0 1 248 0 1 316 0 1 331 0 1 456 0 1 629 0 1 908 0 1 855 0 67.4 71.7 62.1 58.6 62.5 Inpatient bed utilisation rate (District Hospitals) 61.2 65.7 71.9 68.7 68.3 62.8 OPD new client not referred rate (District Hospitals) 76.0 70.1 68.7 Ratio Ambu Hospitals) oulatory to Inpatient days (District 11 1.1 0.9 04 Delivery Caesarean section rate (District Hospitals) 11.9 13.1 13.0 11.2 11.0 10.7 11.4 13.1 12.1 13.7 13.3 Delivery in facility under 18 years rate 9.4 9.6 10.3 10.3 10.3 10.4 9.7 9.8 9.3 10.1 10.2 Inpatient early neonatal death rate 12.2 12.9 116 87 11.8 11.8 11.2 10.6 12.0 13.0 117 Maternal mortality in facility ratio 4.6 144.6 90.7 147.7 273.9 267.1 Maternal mortality ratio institutional 248.2 Stillbirth rate in facility 35.4 29.5 31.0 22.4 23.8 24 1 21.7 22.0 27.3 25.0 25.3 05 Child Health Child under 5 years diarrhoea case fatality rate 75 79 67 3.6 3.9 21 Child under 5 years diarrhoea with dehydration incidence 16.2 14.0 9.1 12.9 4.1 3.9 4.4 Child under 5 years pneumonia case fatality rate 2.8 Child under 5 years pneumonia incidence 120.0 116.2 114 7 104.3 92.2 85.0 Child under 5 years severe acute malnutrition case fatality rate Child under 5 years severe acute malnutrition incidence 28.9 13.0 10.9 8.4 5.6 5.1 44 7.3 Vitamin A coverage 12 to 59 months 12.8 167 22.2 31.8 28.4 32.8 27.2 26.2 32.5 36.4 70.9 88.3 95.1 Immunisation coverage under 1 year 67.7 74.3 81.2 88.3 91.4 92.4 91.9 98.8 06 Immunisation Immunisation coverage under 1 year - adjusted 83.3 Measles 1st to 2nd drop-out rate 12.8 14.9 13.1 15.5 9.8 11.7 12.1 6.9 10.4 15.3 13.4 07\_PMTCT Antenatal client initiated on ART rate 83.1 51.0 55.3 Antenatal visits before 20 weeks rate 39.9 44.6 45.2 43.0 45.5 44.1 46.4 47.1 51.0 52.9 52.9 Early infant HIV diagnosis coverage 55.3 65.1 71.1 HIV prevalence among antenatal clients (survey) 15.2 17.6 16.4 16.2 17.2 18.4 17.0 16.8 18.3 16.1 Infant 1st PCR test positive around 6 weeks rai 12.8 9.3 6.6 5.3 2.7 Percentage PCR tests under 2 months positive 10.7 9.3 6.0 34 3.1 29 Cervical cancer screening coverage 37.9 08\_Reproductive health 12.8 17.7 20.3 26.9 35.1 30.4 30.1 35.1 32.4 31.6 (annua 34.4 35.1 Couple year protection rate (annualised) 27.5 30.2 29.7 30.6 32.4 32.8 33.6 36.0 36.2 09\_TB\_CF Incidence (diagnosed cases) of TB - all types 778.0 859.0 935.0 933.0 892.0 839.0 712 0 Incidence (diagnosed cases) of TB - new PTB sm+ 298.1 293.2 315.3 308.4 Number of TB cases reported (new PTB sm+) 3,381.0 3.419.0 3,651.0 3.585.0 TB case finding index 2.5 2.7 2.6 2.3 68.4 09 TB TO TB cure rate (new sm+) 66.8 61.9 65.0 70.7 68.3 TB defaulter rate (new sm+) 5.6 6.5 7.4 TB successful treatment rate (all TB) 73 5 69.2 76.2 76.8 73 5 72 3 Adult remaining on ART at end of the month 10 HIV 3 321 0 17 348 0 23 377 0 total Child under 15 years remaining on ART at end of the month - total 3,001.0 1.381.0 2.435.0 Male condom distribution rate 8.3 5.8 6.0 6.7 9.5 8.0 11 Socio-demogr Adults (18-65) no secondary schooling 30.8 Medical scheme coverage (ave) 15.4 Percentage of people without piped water in dwelling or within 200m 8.5 12\_Burden of Percentage of deaths garbage codes 137 14 6 Percentage of deaths ill-defined 15.4 15.3 Percentage of Years of Life Lost (YLL) due to HIV and TB 25.3 26.7 lage of Years of Life Lost (YLL) due to 10.2 10.5 Percentage of Years of Life Lost (YLL) due to non-communicable diseases Percent injuries 33.5 36.3 non-communicable diseases Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes 30.9 26.5 Extra Antenatal client HIV prevalence in facility 12.7 12.2 15.8 Area (km2) 372,889.0 Baby initiated on HAART under 18 months rate 46.1 31.4 Baby PCR test around 6 weeks uptake rate 19.4 79.1 80.2 95.8 94.0 Facility crude death rate 4.8 4.6 4.3 5.3 PCV 3rd dose coverage (annualised) 25.8 80.4 92.6 100.6 Population density 3.1 3.1 3.1 3.1 Population total (Census) 1,145,861.0 Population total (DHIS) 1,158,029.0 1,162,539.0 Population under 1 year (Census) 24,678.0

21,690.0

101.1

1.5

106.7

1.5

83.8

1.5

33.2

1.8

Population under 1 year (DHIS)

RV 2nd dose coverage (annualised)

Usable beds per 1 000 population

Province page: NW, North West

				Provinc	e page: NW,	North West							
Category	Indic	2002	2003	2004	2005	2006	Year of IndY 2007	'ear 2008	2009	2010	2011	2012	2013
01_Finance	Percentage of DHS expenditure on district hospitals				35.7	38.1	36.3	32.4	28.9	28.8	29.9	26.9	
	Percentage of DHS expenditure on district management				9.8	10.0	9.3	8.3	7.2	6.6	6.9	9.5	
	Percentage of DHS expenditure on PHC				54.5	51.9	54.4	59.3	63.9	64.6	63.1	63.6	
	Provincial and LG expenditure on District Health Services per capita (uninsured)			20.0	749.0	642.0	870.0	922.0	1,033.0	1,136.0	1,179.0	1,247.0	
	Provincial expenditure per PHC headcount			7.0	137.8	123.8	177.0	193.0	228.7	270.5	283.9	301.3	
	Provincial PHC expenditure per capita (uninsured)			20.0	415.0	342.0	472.0	549.0	660.0	743.0	755.0	802.0	
02_Management PHC	PHC supervisor visit rate (fixed clinic/CHC/CDC)				56.6	52.9	45.7	46.0	51.4	56.9	60.4	69.8	
03 Management	Average length of stay (District Hospitals)	4.0	3.9	3.8	3.7	3.8	3.9	3.7	4.1	4.1	3.5	3.7	
npatients	Expenditure per patient day equivalent (District Hospitals)					1,278.0	1,530.0	1,586.0	1,695.0	1,826.0	1,988.0	2,058.0	
	Inpatient bed utilisation rate (District Hospitals)	57.0	55.9	54.3	58.3	58.4	52.7	58.6	60.8	60.6	59.8	60.2	
	OPD new client not referred rate (District Hospitals)									32.6	28.6	45.0	
	Ratio Ambulatory to Inpatient days (District Hospitals)									1.0	1.1	1.1	
04_Delivery	Caesarean section rate (District Hospitals)	9.7	10.2	8.6	9.5	12.6	14.2	14.3	15.8	18.7	18.2	20.2	
	Delivery in facility under 18 years rate	8.7	8.9	8.2	8.8	9.5	10.1	9.6	8.3	8.1	7.2	7.2	
	Inpatient early neonatal death rate	11.1	12.5	11.5	11.9	11.0	9.7	9.8	10.2	12.8	11.2	10.4	
	Maternal mortality in facility ratio								67.9	204.6	189.7	166.6	
	Maternal mortality ratio institutional							162.6	278.5	239.6			
	Stillbirth rate in facility	30.2	30.6	24.2	23.7	24.9	23.7	23.5	24.7	25.2	24.6	23.5	
05_Child Health	Child under 5 years diarrhoea case fatality rate						10.8	9.0	8.1	5.6	4.9	5.8	
	Child under 5 years diarrhoea with dehydration								13.4	12.4	9.2	7.7	
	Incidence Child under 5 years pneumonia case fatality rate								7.3	7.0	5.0	5.1	
	Child under 5 years pneumonia incidence						91.2	102.1	109.3	82.8	70.0	44.5	
	Child under 5 years severe acute malnutrition								19.0	14.6	11.1	11.2	
	case fatality rate Child under 5 years severe acute malnutrition								7.2	6.7	5.4		
	incidence Vitamin A coverage 12 to 59 months		6.7	12.7	18.7	20.6	23.5	30.9	26.1	27.0	36.8		
06_Immunisation	Immunisation coverage under 1 year	59.4	63.5	63.8	71.5	68.0	78.8	82.7	86.4	77.3	82.9	88.8	
oo_mmanaaaon	Immunisation coverage under 1 year - adjusted	33.4	00.0	03.0	71.5	00.0	70.0	02.7	00.4	11.5	63.1	00.0	
	Measles 1st to 2nd drop-out rate	18.8	13.9	15.8	19.4	15.1	25.5	20.1	15.6	21.2	19.6	802.0 69.8 3.7 2,058.0 60.2 45.0 1.1 20.2 7.2 7.2 10.4 166.6 23.5 5.8 7.7 5.1 5.8 7.7 5.1 44.5 5.5 11.2 5.5 5.5	
07_PMTCT	Antenatal client initiated on ART rate	10.0	13.8	13.0	13.4	13.1	20.0	20.1	13.0	68.1	72.8		
0/_PMICI	Antenatal visits before 20 weeks rate	27.2	33.2	31.7	32.4	31.8	33.2	36.4	37.2	39.6	42.3		
		21.2	33.Z	31.7	32.4	31.0	33.2	30.4	31.2	48.8	42.3 57.0	9     301.3       9     802.0       4     69.8       5     3.7       0     2.058.0       3     60.2       5     4.5.0       1     1.1       2     20.2       2     7.2       3     23.5       9     5.8       2     7.7       0     5.8       2     7.7       0     5.8       2     7.7       0     5.8       1     11.2       4     5.5       3     20.0       3     20.0       4     5.5       3     20.0       3     20.0       3     20.0       3     20.0       4     5.5       3     20.0       3     20.0       4     5.5       3     20.0       5     22.4       6     32.2       7     25.2       7     26.2       8     20.0       9     262.0       10     7.45.0       10     7.45.0       11     10.5       12     29.5       13	
	Early infant HIV diagnosis coverage	24.8	30.9	26.2	32.1	29.1	30.3	30.6	30.0	40.0	30.2		
	HIV prevalence among antenatal clients (survey)	24.0	30.9	20.2	32.1	29.1							
1	Infant 1st PCR test positive around 6 weeks rat						14.9	16.6 8.2	13.3	6.1 3.7	3.9		
	Percentage PCR tests under 2 months positive Cervical cancer screening coverage								5.5				
08_Reproductive health	(annualised)	0.2	0.2	0.6	4.0	18.1	36.4	51.7	47.0	48.4	48.8		
	Couple year protection rate (annualised)	27.2	27.5	26.9	28.9	28.9	23.9	23.9	26.0	26.3	23.6		
09_TB_CF	Incidence (diagnosed cases) of TB - all types Incidence (diagnosed cases) of TB - new PTB					792.0	766.0	815.0	904.0	894.0	882.0		
	sm+								316.5	310.5	286.9	2.8 2.5 49.0 32.2 720.0 262.0 0 8,977.0	
	Number of TB cases reported (new PTB sm+)								10,633.0	10,508.0	9,770.0		
	TB case finding index								1.6	2.7	2.6	2.4	
09_TB_TO	TB cure rate (new sm+)					54.0	53.4	52.3	63.5	66.4	68.9		
	TB defaulter rate (new sm+)								8.3	8.8	7.7		
	TB successful treatment rate (all TB) Adult remaining on ART at end of the month -					62.5	61.2	58.2	65.1	67.2	67.8		
10_HIV	total Child under 15 years remaining on ART at end										72,696.0		138,289.
	of the month - total										6,281.0		9,093.
	Male condom distribution rate	4.3	4.9	5.7	6.2	6.1	6.2	6.7	7.2	8.3	6.0	17.7	
11_Socio-demogr											29.6		
	Medical scheme coverage (ave) Percentage of people without piped water in								13.7				
	dwelling or within 200m										16.7		
12_Burden of disease	Percentage of deaths garbage codes							15.1	15.8				
	Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to							14.3	14.1				
	Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to							26.0	27.1			26.9       9.5       63.6       1.247.0       301.3       802.0       69.8       3.7       2.058.0       45.0       12.058.0       11.1       20.2       10.4       166.6       7.2       10.4       166.7       7.2       10.4       166.7       7.7       5.5       35.8       7.7       44.5       20.0       74.7       44.1       61.1       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       2.8       3.2.2       720.0       2.44.0       3.2.2       720.0       2.44.0       115,058.0       7.445.0       7.7.7       4.9       7.9       7.9       7.10,0       7.20,0       2.44.0       7.7,	
	injuries							9.0	8.4				
	Percentage of Years of Life Lost (YLL) due to non-communicable diseases							27.8	29.9				
	Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes							37.2	34.6				
Extra	Antenatal client HIV prevalence in facility									37.2	34.3	29.6	
	Area (km2)										104,882.0		
	Baby initiated on HAART under 18 months rate									43.4	48.5		
	Baby PCR test around 6 weeks uptake rate						69.2	79.2	80.4	97.0	103.4	103.0	
	Facility crude death rate								5.6	6.0	5.6	6.5	
	PCV 3rd dose coverage (annualised)							0.1	24.5	62.0	86.2	95.8	
	Population density	28.7	29.0	29.3	29.6	31.2	31.5	31.8	32.0	32.3	32.5	32.7	
	Population total (Census)										3,509,953.0		
	Population total (DHIS)										3,405,416.0	3,426,110.0	
	Population under 1 year (Census)										83,901.0		
	Population under 1 year (DHIS)										64,316.0		
	RV 2nd dose coverage (annualised)							0.0	29.7	61.8	87.9	97.7	
	Usable beds per 1 000 population								1.4	1.4	1.4	1.4	

### Section B: Profile South Africa

#### Province page: WC, Western Cape Year of IndYear Category Indic 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 Percentage of DHS expenditure on district hospitals Percentage of DHS expenditure on district management 34.8 01 Finance 27.9 26.6 25.5 34.2 36.1 35.2 35.1 37.6 2.1 5.6 5.3 4.1 5.6 5.8 5.6 5.3 4.8 Percentage of DHS expenditure on PHC 70.0 67.8 69.2 617 59.6 58.0 59.2 59.6 577 Provincial and LG expenditure on District Health Services per capita (uninsured) 688.0 757.0 804.0 1,034.0 970.0 1,175.0 1,309.0 1,361.0 1,400.0 Provincial expenditure per PHC he 136.0 143.6 163.0 182.6 166.0 183.6 209.3 223.8 233.5 Provincial PHC expenditure per capita (uninsured) 508.0 526.0 561.0 627.0 624.0 706.0 805.0 842.0 825.0 02\_Management PHC PHC supervisor visit rate (fixed clinic/CHC/CDC) 29.8 38.4 60.5 73.7 76.4 74.3 79.6 Average length of stay (District Hospitals) 3.2 3.1 3.1 3.2 3.3 3.1 2.6 3.0 3.1 3.2 3.1 03\_Management Inpatients Expenditure per patient day equivalent (District Hospitals) 691.0 698.0 581.0 1 087 0 1 087 0 1 587 0 1 729 0 1 593 0 1 647 0 Inpatient bed utilisation rate (District Hospitals) 77.8 81.9 84.7 87.6 72.6 70.0 78.3 81.6 82.1 78.5 77.3 OPD new client not referred rate (District Hospitals) Ratio Ambulatory to Inpatient days (Distric Hospitals) oulatory to Inpatient days (District 0.9 12 1.0 04 Delivery Caesarean section rate (District Hospitals) 17.2 17.8 17.6 18.7 19.9 20.4 20.7 21.9 23.3 23.7 24.1 Delivery in facility under 18 years rate 8.2 7.8 8.2 8.3 8.8 8.5 7.8 7.3 6.8 6.7 6.5 Inpatient early neonatal death rate 51 47 58 65 6.9 63 54 52 49 51 62 Maternal mortality in facility ratio 28.6 8.7 61.7 92.0 Maternal mortality ratio institutional 118.5 Stillbirth rate in facility 21.9 17.0 18.0 18.8 20.1 20.6 20.7 22.9 20.8 19.1 176 05 Child Health Child under 5 years diarrhoea case fatality rate 11 04 04 0.3 02 01 Child under 5 years diarrhoea with dehydration incidence 30.3 19.1 17.2 16.8 0.3 Child under 5 years pneumonia case fatality rate 0.7 0.5 Child under 5 years pneumonia incidence 90.9 86.4 83.3 68 7 72 1 63.0 Child under 5 years severe acute malnutrition case fatality rate Child under 5 years severe acute malnutrition incidence 3.2 1.8 3.9 5.9 2.7 3.2 3.0 Vitamin A coverage 12 to 59 months 0.0 11.1 26.5 33.6 32.0 38.2 32.3 38.0 39.1 76.5 99.2 89.5 Immunisation coverage under 1 year 73.7 86.4 97.0 101.6 102.2 90.8 89.0 06 Immunisation 79.3 Immunisation coverage under 1 year - adjusted 79.2 Measles 1st to 2nd drop-out rate 7.7 8.7 9.1 11.8 15.2 19.7 21.4 19.3 16.4 16.8 23.1 07\_PMTCT Antenatal client initiated on ART rate 94.2 98.5 97.0 52.7 Antenatal visits before 20 weeks rate 37.7 37.4 38.0 42.6 56.2 58.2 38.0 38.6 38.3 Early infant HIV diagnosis coverage 65.3 71.6 75.2 HIV prevalence among antenatal clients (survey) 12.4 13.1 15.4 15.3 16.1 18.5 18.2 15.7 15.2 16.9 Infant 1st PCR test positive around 6 weeks rai 4.8 4.1 3.3 2.7 2.1 1.7 Percentage PCR tests under 2 months positive 6.3 47 42 3.1 2.0 1.8 Cervical cancer screening coverage 34.7 08\_Reproductive health 37.1 33.2 32.9 37.0 38.4 52.9 57.9 65.8 64.4 61.3 (annua 58.4 56.5 59.4 58.8 58.3 Couple year protection rate (annualised) 33.2 34.6 38.9 39.7 53.6 70.2 09\_TB\_CF Incidence (diagnosed cases) of TB - all types 959 0 938.0 948.0 930.0 910.0 863.0 800.0 Incidence (diagnosed cases) of TB - new PTB sm+ 269.5 284.4 264.6 242.1 Number of TB cases reported (new PTB sm+) 14,697.0 14,511.0 15,515.0 13.659.0 TB case finding index 2.0 2.0 2.0 1.9 09 TB TO TB cure rate (new sm+) 75.7 77.4 78.8 79.8 81.3 81.4 TB defaulter rate (new sm+) 7.1 6.8 6.9 TB successful treatment rate (all TB) 77 1 79.2 79.9 80.2 81.6 81.5 Adult remaining on ART at end of the month 10 HIV 85 223 0 108 290 0 126 348 0 total Child under 15 years remaining on ART at end of the month - total 5,597.0 6.903.0 7.449.0 Male condom distribution rate 45.7 31.7 38.7 34.5 38.6 45.8 56.1 11 Socio-demogr Adults (18-65) no secondary schooling 17.5 Medical scheme coverage (ave) 25.5 Percentage of people without piped water in dwelling or within 200m 2.8 12\_Burden of Percentage of deaths garbage codes 18.2 16.2 Percentage of deaths ill-defined 8.6 7.8 Percentage of Years of Life Lost (YLL) due to HIV and TB 23.4 23.5 lage of Years of Life Lost (YLL) due to Percentage of Years of Life Lost (YLL) due to non-communicable diseases 17.6 15.8 47.5 45.4 non-communicable diseases Percentage of YLLs due to communicable, maternal, perinatal, nutrition causes 13.6 13.2 Extra Antenatal client HIV prevalence in facility 14.0 11.7 11.6 129,462.0 Area (km2) Baby initiated on HAART under 18 months rate Baby PCR test around 6 weeks uptake rate 88.0 93.1 95.8 93.9 37.0 55.0 Facility crude death rate 2.6 2.9 2.8 3.7 PCV 3rd dose coverage (annualised) 16.2 71.0 84.5 89.0 Population density 41.6 42.1 42.9 43.6 40.1 40.8 Population total (Census) 5,822,734.0 Population total (DHIS) 5.553.968.0 5.641.880.0 Population under 1 year (Census) 117 651 0

103,623.0

83.6

1.9

87.1

1.9

63.4

2.0

19.7

2.0

### 236

Population under 1 year (DHIS)

RV 2nd dose coverage (annualised)

Usable beds per 1 000 population

# Table 2:SA averages, 2012/13

							Year of IndY						
		2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
	Percentage of DHS expenditure on district hospitals Percentage of DHS expenditure on district			51.5	47.9	46.6	45.5	42.6	42.2	40.3	39.1	37.5	
	management			5.7	4.8	4.8	5.3	5.7	5.2	5.2	5.5	5.8	
	Percentage of DHS expenditure on PHC			42.8	47.3	48.6	49.2	51.6	52.6	54.5	55.4	56.7	
	Provincial and LG expenditure on District Health Services per capita (uninsured)			659.1	765.3	804.3	905.6	981.8	1,101.9	1,202.5	1,257.5	1,327.3	
	Provincial expenditure per PHC headcount			131.7	157.6	163.7	186.6	185.9	204.9	236.7	237.4	255.2	
	Provincial PHC expenditure per capita (uninsured)			324.0	403.4	433.6	487.6	525.8	598.5	682.9	722.2	780.0	
	PHC supervisor visit rate (fixed clinic/CHC/CDC)				26.7	36.8	48.0	61.3	69.3	68.4	74.1	76.0	
	Average length of stay (District Hospitals)	4.8	4.6	4.3	4.4	4.4	4.5	4.4	4.3	4.3	4.3	4.2	
	Expenditure per patient day equivalent (District Hospitals)			1,093.4	1,174.3	1,204.7	1,381.2	1,415.8	1,532.3	1,713.8	1,740.2	1,823.3	
,	Inpatient bed utilisation rate (District Hospitals)	60.7	61.0	62.2	64.1	64.8	65.4	68.0	67.6	64.7	67.2	67.3	
	OPD new client not referred rate (District Hospitals)									65.6	64.6	64.1	
	Ratio Ambulatory to Inpatient days (District Hospitals)									1.2	1.3	1.3	
-	Caesarean section rate (District Hospitals)	12.7	12.7	13.3	13.9	15.1	15.6	16.3	17.6	18.5	19.9	20.8	
	Delivery in facility under 18 years rate	9.3	8.8	8.9	9.3	9.4	9.2	8.7	8.1	8.0	8.1	7.7	
	Inpatient early neonatal death rate	9.4	10.6	10.5	9.9	9.6	8.7	9.1	9.5	10.0	10.2	10.2	
	Maternal mortality in facility ratio						74.5	70.1	93.4	138.5	144.9	132.9	
	Maternal mortality ratio institutional							165.6	189.5	182.8			
	Stillbirth rate in facility	28.5	27.0	24.4	23.9	23.8	23.4	22.3	23.0	22.7	22.5	21.8	
	Child under 5 years diarrhoea case fatality rate						8.9	8.4	7.1	7.0	4.6	4.3	
	Child under 5 years diarrhoea case ratainy rate						0.9	0.4					
	incidence								21.1	17.1	14.0	12.0	
	Child under 5 years pneumonia case fatality rate								6.6	5.8	4.2	3.8	
	Child under 5 years pneumonia incidence						90.1	94.9	97.4	83.6	80.3	66.8	
	Child under 5 years severe acute malnutrition case fatality rate								19.3	16.4	13.3	12.7	
	Child under 5 years severe acute malnutrition								5.5	4.9	4.3	4.4	
	incidence		a -										
-	Vitamin A coverage 12 to 59 months		8.8	12.8	18.9	25.1	28.1	32.2	33.9	34.6	43.4	42.8	
	Immunisation coverage under 1 year	68.5	71.5	73.1	81.4	84.8	86.0	90.6	95.3	89.2	95.2	94.0	
	Immunisation coverage under 1 year - adjusted										80.1		
	Measles 1st to 2nd drop-out rate	12.4	13.8	15.7	20.4	15.1	19.5	16.3	8.9	14.5	15.4	17.0	
	Antenatal client initiated on ART rate									86.7	80.4	81.6	
	Antenatal visits before 20 weeks rate	30.5	29.3	30.3	31.5	31.3	31.4	32.9	34.5	37.6	40.2	44.0	
		50.5	20.0	50.5	51.5	51.5	51.4	52.5	54.5				
	Early infant HIV diagnosis coverage									56.2	66.9	73.9	
	HIV prevalence among antenatal clients (survey)	26.5	27.9	29.5	30.2	29.1	29.4	29.3	29.4	30.2	29.5		
	Infant 1st PCR test positive around 6 weeks rat						10.4	9.0	10.9	7.6	4.0	2.5	
	Percentage PCR tests under 2 months positive						10.7	8.4	5.7	3.8	2.7	2.4	
	Cervical cancer screening coverage (annualised)	10.6	11.7	15.0	21.0	32.0	36.1	45.6	47.6	52.2	55.0	55.4	
ŧ		26.3	26.4	27.3	28.0	30.2	30.0	30.9	31.9	31.6	32.7	37.8	
	Couple year protection rate (annualised)	20.0	20.4	21.5	20.0								
	Incidence (diagnosed cases) of TB - all types					577.7	608.2	752.8	831.8	718.4	779.8	687.3	
	Incidence (diagnosed cases) of TB - new PTB sm+								274.7	232.8	259.4	235.7	
	Number of TB cases reported (new PTB sm+)								135,978.0	116,308.0	130,826.0	119,901.0	
	TB case finding index								2.3	2.6	2.6	2.4	
	TB cure rate (new sm+)					61.6	62.7	66.6	69.3	69.2	74.2		
	TB defaulter rate (new sm+)												
	To deladiter rate (new sili+)								7.0	6.0	6.1		
									7.0	6.8	6.1		
	TB successful treatment rate (all TB)					70.0	68.8	71.3	7.0 72.3	6.8 70.8	6.1 75.4		
	Adult remaining on ART at end of the month - total					70.0	68.8	71.3				1,439,445.0	2,161,170
	Adult remaining on ART at end of the month - total					70.0	68.8	71.3			75.4	1,439,445.0 97,738.0	
		5.1	5.8	8.0	9.1	70.0	68.8	71.3			75.4 938,034.0		
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate	5.1	5.8	8.0	9.1				72.3	70.8	75.4 938,034.0 69,707.0 15.8	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling	5.1	5.8	8.0	9.1				72.3	70.8	75.4 938,034.0 69,707.0	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave)	5.1	5.8	8.0	9.1				72.3	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m	5.1	5.8	8.0	9.1				72.3	70.8	75.4 938,034.0 69,707.0 15.8	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling	5.1	5.8	8.0	9.1				72.3	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m	5.1	5.8	8.0	9.1			12.2	72.3 13.3 16.9	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of deaths ill-defined Percentage of vers of Life Lost Y(L1) due to HIV and	5.1	5.8	8.0	9.1			12.2	72.3	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths glarbage codes Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and TB	5.1	5.8	8.0	9.1			12.2 15.4 14.3 27.6	72.3 13.3 16.9 15.9 14.3 27.6	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medica distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and Percentage of Years of Life Lost (YLL) due to hijuries	5.1	5.8	8.0	9.1			12.2 15.4 14.3 27.6 10.6	72.3 13.3 16.9 15.9 14.3 27.6 10.5	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Mele condom distribution rate Adults (18-85) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths di-defined Percentage of deaths di-defined Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to injuries Percentage of Years of Life Lost (YLL) due to injuries	5.1	5.8	80	9.1			12.2 15.4 14.3 27.6	72.3 13.3 16.9 15.9 14.3 27.6	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medica distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and Percentage of Years of Life Lost (YLL) due to hijuries	5.1	5.8	8.0	9.1			12.2 15.4 14.3 27.6 10.6	72.3 13.3 16.9 15.9 14.3 27.6 10.5	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Male condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths ill-defined Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to injuries Perc	5.1	5.8	8.0	9.1			12.2 15.4 14.3 27.6 10.6 29.8	72.3 13.3 16.9	70.8	75.4 938,034.0 69,707.0 15.8 21.6	97,738.0	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medical distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths all-defined Percentage of deaths all-defined Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to injuries Percentage of Years of Life Lost (YLL) due to injuries Percentage of Years of Life Lost (YLL) due to injuries Percentage of Years of Life Lost (YLL) due to injuries Percentage of YLLs due to communicable, maternal, perinal, nutrino causes	5.1	5.8	8.0	9.1			12.2 15.4 14.3 27.6 10.6 29.8	72.3 13.3 16.9	70.8	75.4 938,034.0 69,707.0 15.8 21.6 16.9	97,738.0 22.1	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medic condom distribution rate Adults (18-65) on secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths ill-defined Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of YLLs due to communicable, maternal, perinal, nutrifico causes Antenatal client HIV prevalence in facility Area (km2)	5.1	5.8	80	9.1			12.2 15.4 14.3 27.6 10.6 29.8	72.3 13.3 16.9	70.8	75.4 938,034.0 69,707.0 15.8 21.6 16.9 1.220,813.3	97,738.0 22.1	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medic condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths ill-defined Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of YLL s due to communicable, maternal, perintal, nutrifico causes Antenatal client HIV prevalence in facility Area (km2) Baby initiated on HAART under 18 months rate	5.1	5.8	8.0	9.1		11.7	12.2 15.4 14.3 27.6 10.6 29.8 32.0	72.3 13.3 16.9 15.9 14.3 27.6 10.5 32.0 29.9	70.8 14.8 29.1 52.7	75.4 938,034.0 69,707.0 15.8 21.6 16.9 1.220,813.3 54.4	97.738.0 22.1 27.3	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medic condom distribution rate Adults (18-85) on secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths (Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of YLL is due to communicable, maternal, perintal, nutfind causes Antenatal client HIV prevalence in facility Area (km2) Baby initiated on HAART under 18 months rate Baby PCR test around 6 weeks uptake rate	5.1	5.8	80	9.1			12.2 15.4 14.3 27.6 10.6 29.8	72.3 13.3 16.9 15.9 14.3 27.6 10.5 32.0 29.9	70.8 14.8 29.1 52.7 86.0	75.4 938,034.0 69,707.0 15.8 21.6 16.9 1.220,813.3 54.4 92.8	97.738.0 22.1 27.3 98.7	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medic condom distribution rate Adults (18-65) no secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths ill-defined Percentage of deaths ill-defined Percentage of Years of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of YLL s due to communicable, maternal, perintal, nutrifico causes Antenatal client HIV prevalence in facility Area (km2) Baby initiated on HAART under 18 months rate	5.1	5.8	80	9.1		11.7	12.2 15.4 14.3 27.6 10.6 29.8 32.0	72.3 13.3 16.9 15.9 14.3 27.6 10.5 32.0 29.9	70.8 14.8 29.1 52.7	75.4 938,034.0 69,707.0 15.8 21.6 16.9 1.220,813.3 54.4	97.738.0 22.1 27.3	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medic condom distribution rate Adults (18-85) on secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths garbage codes Percentage of deaths (Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of YLL is due to communicable, maternal, perintal, nutfind causes Antenatal client HIV prevalence in facility Area (km2) Baby initiated on HAART under 18 months rate Baby PCR test around 6 weeks uptake rate	5.1	5.8	8.0	9.1		11.7	12.2 15.4 14.3 27.6 10.6 29.8 32.0	72.3 13.3 16.9 15.9 14.3 27.6 10.5 32.0 29.9	70.8 14.8 29.1 52.7 86.0	75.4 938,034.0 69,707.0 15.8 21.6 16.9 1.220,813.3 54.4 92.8	97.738.0 22.1 27.3 98.7	
	Adult remaining on ART at end of the month - total Child under 15 years remaining on ART at end of the month - total Medic condom distribution rate Adults (18-85) on secondary schooling Medical scheme coverage (ave) Percentage of people without piped water in dwelling or within 200m Percentage of deaths garbage codes Percentage of vears of Life Lost (YLL) due to HIV and TB Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of Years of Life Lost (YLL) due to Injuries Percentage of YLL s due to communicable, maternal, perintal, nutrition causes Antenatal client HIV prevalence in facility Area (km2) Baby initiated on HAART under 18 months rate Baby PCR test around 6 weeks uptake rate Facility crude death rate	5.1	5.8	8.0	9.1		11.7	12.2 15.4 14.3 27.6 10.6 29.8 32.0 70.4	72.3 13.3 16.9 15.9 14.3 27.6 10.5 32.0 29.9 29.9	70.8 14.8 29.1 52.7 88.0 5.5	75.4 938,034.0 69,707.0 15.8 21.6 16.9 1,220,813.3 54.4 92.8 5.1	97.738.0 22.1 27.3 98.7 5.8	
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# **12 Eastern Cape Province**

# **Buffalo City Metropolitan Municipality**

Buffalo City in the Eastern Cape was demarcated as a new metropolitan (metro) area and thus a separate health district in 2011 (with the Amathole Health District being split). The metro has an estimated medical scheme coverage of 14.7%.<sup>a</sup>

The proportion of district health services expenditure on district management increased from 2.9% in 2011/12 to 4.6% in 2012/13, but was below the provincial average of 7.2%. The proportion of total district expenditure on primary health care (PHC) was 72.0%. The percentage expenditure on district hospital services was 23.4%, significantly below the provincial average of 40.2%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) decreased from 82.3% in 2011/12 to 75.0% and was below the national average of 76.0%.

The inpatient bed utilisation rate decreased from 72.9% in 2009/10 to 68.2%; however, it was above both the provincial (62.1%) rate. The average length of stay of 6.3 days was the longest in the province. The expenditure per patient day equivalent was R1 890 and above the provincial (R1 730) and the national (R1 823) averages. The ratio of ambulatory to inpatient days was 1.1. The OPD new client not referred rate more than doubled over three years to 63.4%, similar to the national (64.1%) rate. This indicates that a high percentage of clients bypass the PHC facilities and access the district hospitals directly.

The delivery by Caesarean section rate was 21.3%, an increase from the 18.8% of the previous year. The delivery in facility under 18 years rate was the lowest in the province at 6.4%. The facility maternal mortality ratio increased from 164.2 per 100 000 live births in 2011/12 to 196.9 and was the highest in the province. The stillbirth in facility rate was 22.1 per 1 000 births – just above the national rate of 21.8 per 1 000 births. At 14.0 per 1 000 live births, the inpatient early neonatal death rate was below the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 38.3%; this rate has increased annually since 2008/09 when it was 26.3%, and it was still below the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows an increase in the HIV prevalence among antenatal clients tested, from 33.1% in 2011 to 34.1% in 2012. The antenatal client initiated on antiretroviral therapy (ART) rate was 69.3%, well below the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 57.0% and was the second lowest in the province. The infant 1st PCR test positive around 6 weeks rate (DHIS data) at 2.3% was higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 1.6%.

The immunisation coverage under 1 year was 104.3%, exceeding 100%, and may be due to poor data quality or an underestimation of the under-1 population. At 12.3%, the measles 1st to 2nd dose drop-out rate was well below the provincial rate of 18.5% and the national rate of 17.0%.

At 16.0 episodes per 1 000 children, the child under 5 years diarrhoea with dehydration incidence was the highest in the province. The child under 5 years diarrhoea case fatality rate was 2.8%, well below the national rate of 4.3%. The child under 5 years pneumonia incidence at 76.9 cases per 1 000 children was also the highest in the province and above the national (66.8 per 1 000) incidence. The child under 5 years pneumonia case fatality rate was 1.4%, much lower than both the provincial (4.4%) and the national (3.8%) rates. At 3.6 cases per 1 000 children, the child under 5 years severe acute malnutrition incidence was the second lowest in the province and below the national incidence of 4.4, whilst the child under 5 years severe acute malnutrition case fatality rate was 10.7% but below the national rate of 12.7%. The vitamin A coverage 12 to 59 months was 39.7%.

The cervical cancer screening coverage decreased from 34.9% in 2011/12 to 30.8% and was well below the national coverage of 55.4%. The couple year protection rate remained stable at 25.7% but was below the national rate of 37.8%.

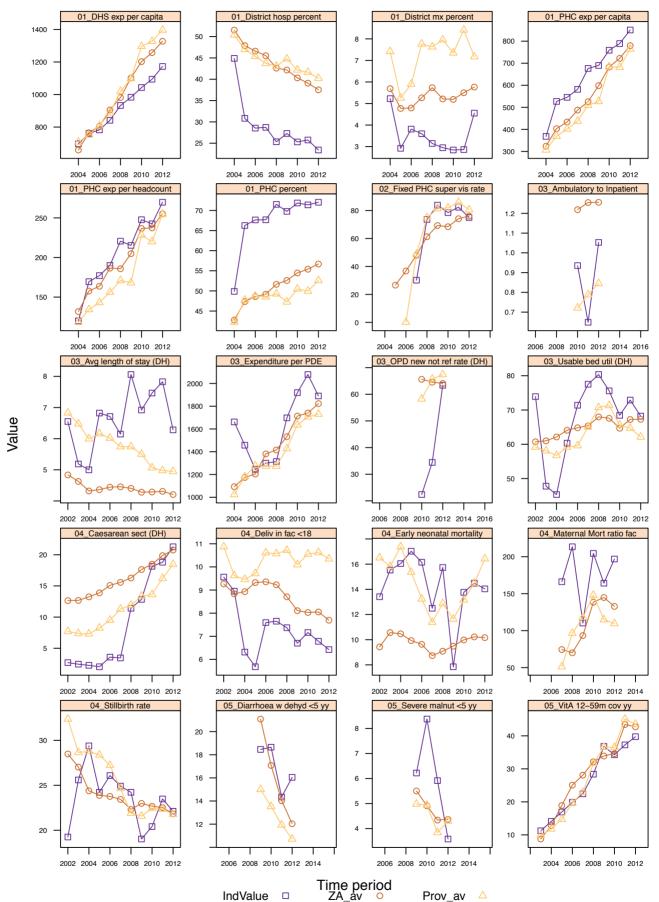
The TB incidence (all cases) was 781.2 per 100 000 people. This was well below the provincial incidence of 831.7, but above the national incidence of 687.3 per 100 000 people. The TB case finding index was 3.3%. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 2 653 in 2011 to 2 758, resulting in a TB incidence (new pulmonary smear-positive) of 344.2 per 100 000 people. This was well above the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 55.4%, the lowest rate in the province, and the TB (new pulmonary smear-positive) defaulter rate was 11.7% and well above the national rate of 6.1%. The TB treatment success rate (all TB) was 70.5%.

At 8.9 condoms per male 15 years and older, the male condom distribution coverage was the lowest in the province and the sixth lowest in the country. The total number of adults remaining on ART at end of the month increased from 23 973 at

## Naomi Massyn

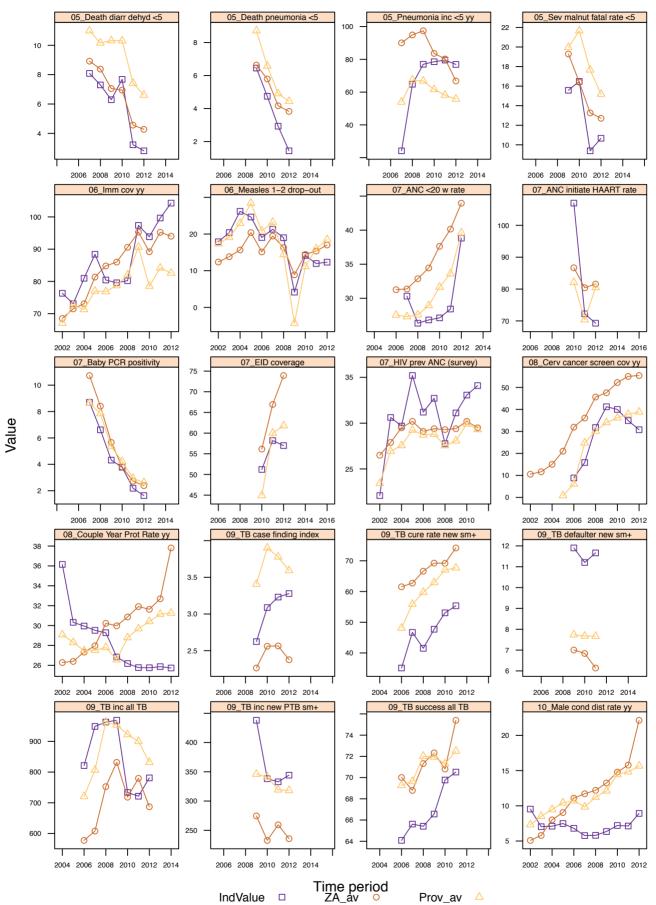
a There has been no new source of information on medical scheme coverage since the new demarcation, and this coverage was estimated using the metro/non-metro and socio-economic quintile distribution of beneficiaries in other districts to redistribute the beneficiaries to the new boundaries.

the end of 2011/12 to 25 623 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 519 to 1 923 in the same period.



### Annual indicators for district: Buffalo City: BUF

#### Annual indicators for district: Buffalo City: BUF



# **Cacadu District Municipality**

## Naomi Massyn

Cacadu District in the Eastern Cape has an estimated medical scheme coverage of 14.6%.

The proportion of district health services expenditure on district management dropped by almost five percentage points from 15.1% in 2011/12 to 10.6% in 2012/13. However, it was still above the provincial average of 7.2%. The proportion of total district expenditure on primary health care (PHC) increased significantly from 32.6% to 40.1% in the same period. The percentage expenditure on district hospital services was 49.3%.

At 88.0%, the PHC supervisor visit rate (fixed clinic/CHC/CDC) was the best in the province and well above the national average of 76.0%.

The inpatient bed utilisation rate was 62.6% and below the national (67.3%) rate. The average length of stay has remained stable at 3.6 days for the past three years. The expenditure per patient day equivalent was R1 790, and this was above the provincial average of R1 730 but below the national average of R1 823. The ratio of ambulatory to inpatient days was 0.8, which means that more clients are admitted to hospital than are seen at the emergency unit/OPD clinics. The OPD new client not referred rate was 72.4%, and is above the national (64.1%) rate. This indicates that a large proportion of patients bypass PHC facilities and are seen at emergency units and/or the outpatient departments of district hospitals.

The delivery by Caesarean section rate increased annually from 14.8% in 2008/09 to 27.7%, and was the second highest in the province. It was also well above the national rate of 20.8%. The delivery in facility under 18 years rate was 7.7% and on par with the national rate of 7.7%. The facility maternal mortality ratio increased drastically from 47.1 per 100 000 live births in 2011/12 to 173.3 per 100 000 live births. This was the second highest in the province and well above the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate was also the second highest in the province at 22.9 per 1 000 births, and increased from 20.3 per 1 000 births in 2011/12 to be above the national rate of 21.8 per 1 000 births. However, at 5.0 per 1 000 live births, the inpatient early neonatal death rate was the lowest in the province and well below the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate of 56.9% was the highest in the province and well above the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows an increase of five percentage points in the HIV prevalence among antenatal clients tested from 20.7% in 2010 to 25.8% in 2011, with a fairly wide range of uncertainty and fluctuations year-on-year. However, it was still the lowest in the province. The equivalent District Health Information System (DHIS) indicator (ANC HIV prevalence in facility) was between these values and ranged between 21.2% and 22.1% from 2010/11 to 2012/13. The antenatal client initiated on ART rate was 74.5% and was below the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 75.4%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 4.7% was more than double the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.1%.

The immunisation coverage under 1 year was 88.0%, higher than the provincial coverage of 82.6%. At 11.9%, the measles 1st to 2nd dose drop-out rate was the lowest in the province.

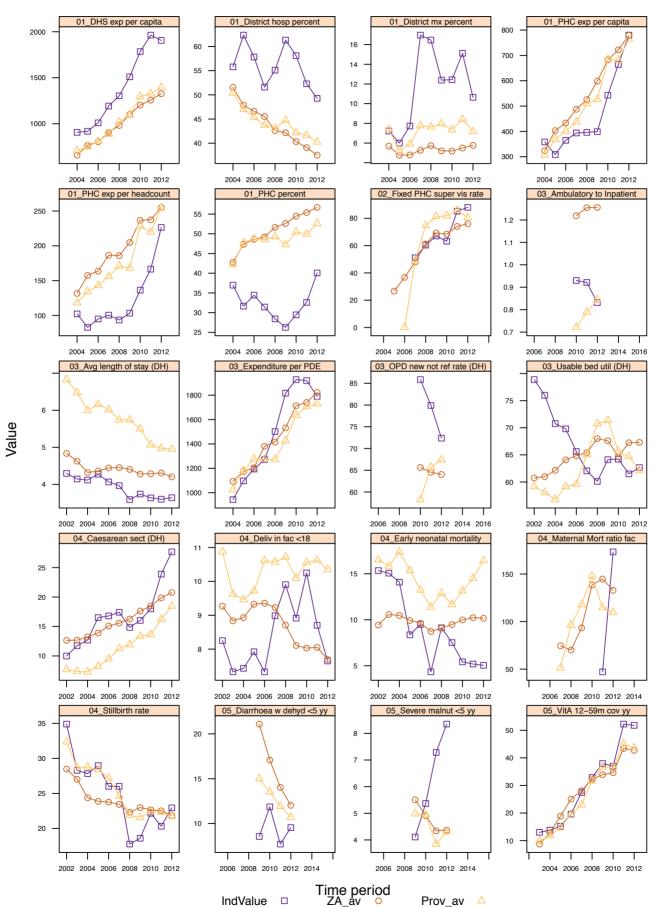
The child under 5 years diarrhoea with dehydration incidence increased from 7.7 episodes per 1 000 children in 2011/12 to 9.5 episodes per 1 000 children in 2012/13. The child under 5 years diarrhoea case fatality rate at 2.0% was the lowest in the province and well below the national rate of 4.3%. The child under 5 years pneumonia incidence increased from 56.5 cases per 1 000 children in 2011/12 to 67.0 and this was in line with the national incidence of 66.8 cases per 1 000 children. The child under 5 years pneumonia case fatality rate was 1.0%, also the lowest rate in the province and below the national rate of 3.8%, whilst the child under 5 years severe acute malnutrition incidence of 8.3 cases per 1 000 children was the highest in the province. The child under 5 years severe acute malnutrition case fatality rate was 4.0%, and was the lowest child death rate in the province and well below the national rate of 12.7%. The vitamin A coverage 12 to 59 months of 51.8% was the highest in the province and above the national coverage of 42.8%.

The cervical cancer screening coverage was 31.0% and the couple year protection rate was 40.7%.

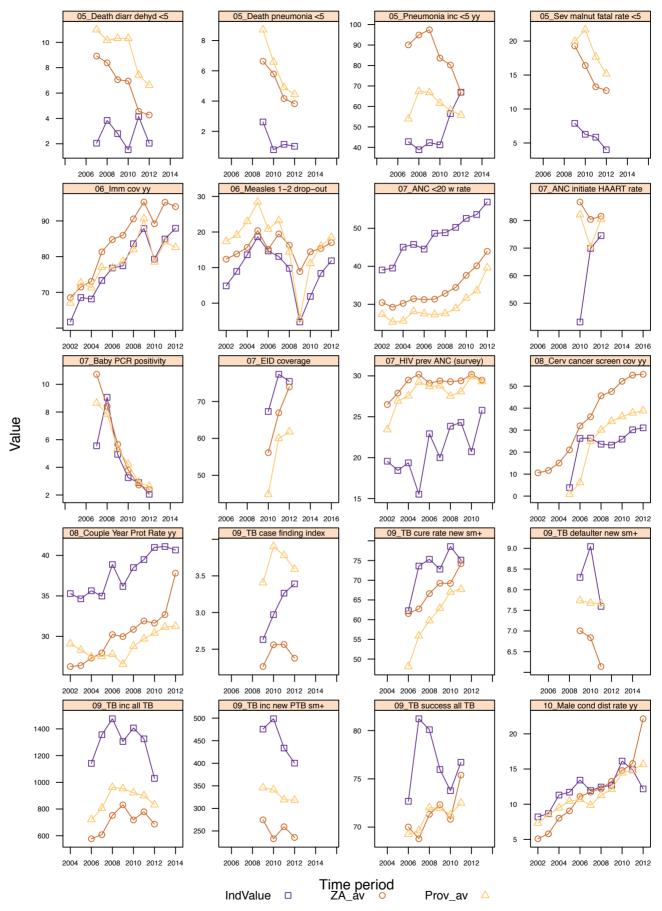
The TB incidence (all cases) of 1 029.2 per 100 000 people was the highest in the province, the third highest nationally, and well above the provincial and national averages of 831.7 and 687.3 per 100 000 respectively. The TB case finding index was 3.4%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 915 in 2011 to 1 782, resulting in a decrease of the TB incidence (new pulmonary smear-positive) from 433.6 per 100 000 people in 2011 to 400.3. It was well above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate decreased from 78.6% in 2010 to 75.1% in 2011. However, the TB (new pulmonary smear-positive) defaulter rate also dropped from 9.0% to 7.6% in the same period but was above the national rate of 6.1%. The TB new client treatment success rate increased from 73.8% in 2010 to 76.7% in 2011.

The male condom distribution coverage decreased from 14.9 condoms per male 15 years and older in 2011/12 to 12.2 condoms, far below the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the

month increased from 9 330 at the end of 2011/12 to 12 583 by the end of 2012/13, and the total number of the children under 15 years remaining on ART at end of the month also increased from 848 to 1 009 in the same period.



#### Annual indicators for district: Cacadu: DC10



#### Annual indicators for district: Cacadu: DC10

## **Amathole District Municipality**

## Naomi Massyn

Amathole District in the Eastern Cape has an estimated medical scheme coverage of 8.7%.

The proportion of district health services expenditure on district management decreased from 8.0% in 2011/12 to 6.9% in 2012/13, just below the provincial average of 7.2%. The proportion of total district expenditure on primary health care (PHC) increased from 48.6% to 50.6% in the same period. The percentage expenditure on district hospital services was 42.5%.

At 83.1%, the PHC supervisor visit rate (fixed clinic/CHC/CDC) was well above the national average of 76.0%. However, the rate decreased from 91% in 2011/12.

The inpatient bed utilisation rate has decreased annually over the past three years, from 79.7% in 2009/10 to 59.5% in 2012/13, below the provincial (62.1%) and national (67.3%) rates. The average length of stay was 5.5 days. At R1 695, the expenditure per patient day equivalent was below the provincial (R1 730) and the national (R1 823) averages. The ratio of ambulatory to inpatient days was 0.7. This indicates that more patients are admitted as inpatients than are seen at the emergency units and/or the outpatient departments. The OPD new client not referred rate was 74.6%. This was well above the provincial (67.4%) and national (64.1%) rates, and indicates that a high proportion of patients seen at the emergency units and/or the outpatient departments are bypassing PHC facilities and accessing district hospitals directly.

The delivery by Caesarean section rate was 13.2%, an increase from the 10.8% of the previous year. The delivery in facility under 18 years rate remained stable at 11.8% and well above the national rate of 7.7%. The facility maternal mortality ratio decreased from 97.5 per 100 000 live births in 2011/12 to 18.6 per 100 000 live births in 2012/13 and was the lowest in the province and eighth lowest nationally. The stillbirth in facility rate was 18.2 per 1 000 births, below the national rate of 21.8 per 1 000 births. At 10.7 per 1 000 live births, the inpatient early neonatal death rate was above the national rate of 10.2 but below the provincial rate of 16.4 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 37.7% and has increased annually since 2007/08 when it was 23.4%, but is still below the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows a decrease in the HIV prevalence among antenatal clients, from 30.2% in 2010 to 28.4% in 2011. The antenatal client initiated on ART rate was 61.9%, and was well below the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 79.2% and was the second highest in the province. The infant 1st PCR test positive around 6 weeks rate (DHIS data) at 3.2% was higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.5%.

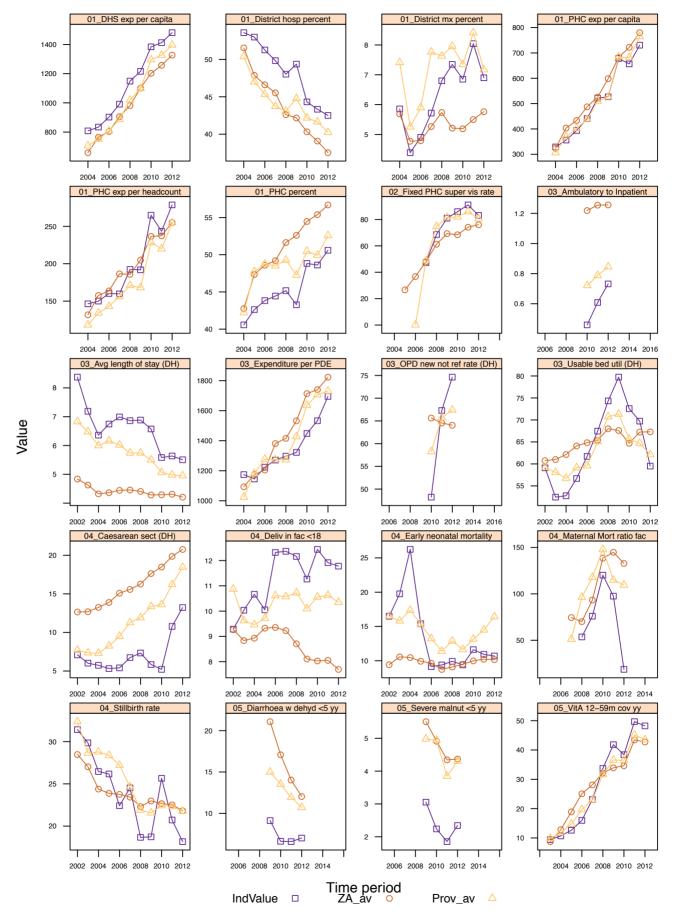
The immunisation coverage under 1 year dropped from 82.1% in 2011/12 to 80.7%, and was below the provincial (82.6%) and national (94%) values. At 17.6%, the measles 1st to 2nd dose drop-out rate was below the provincial rate of 18.5%.

The child under 5 years diarrhoea with dehydration incidence was 7.0 episodes per 1 000 children and the lowest in the province. The child under 5 years diarrhoea case fatality rates increased from 6.9% in 2011/12 to 8.6%, the second highest in the province and double the national rate of 4.3%. The child under 5 years pneumonia incidence decreased from 46.5 cases per 1 000 children to 43.3, ranking as the lowest in the province and below the national (66.8 per 1 000 children) incidence. The child under 5 years pneumonia case fatality rate increased from 3.9% in 2011/12 to 6.6%, higher than both the provincial (4.4%) the national (3.8%) rates. At 2.3 cases per 1 000 children, the child under 5 years severe acute malnutrition incidence was the lowest in the province and well below the national incidence of 4.4. The child under 5 years severe acute malnutrition case fatality rate was 18.1%. This was the second highest in the province and among the 10 highest in the country. However, this rate has dropped annually from 25.3% in 2010/11. The vitamin A coverage 12 to 59 months was 48.2%.

The cervical cancer screening coverage remained stable at 37.2% and was below the national coverage of 55.4%. The couple year protection rate of 29.2% was also below the national rate of 37.8%.

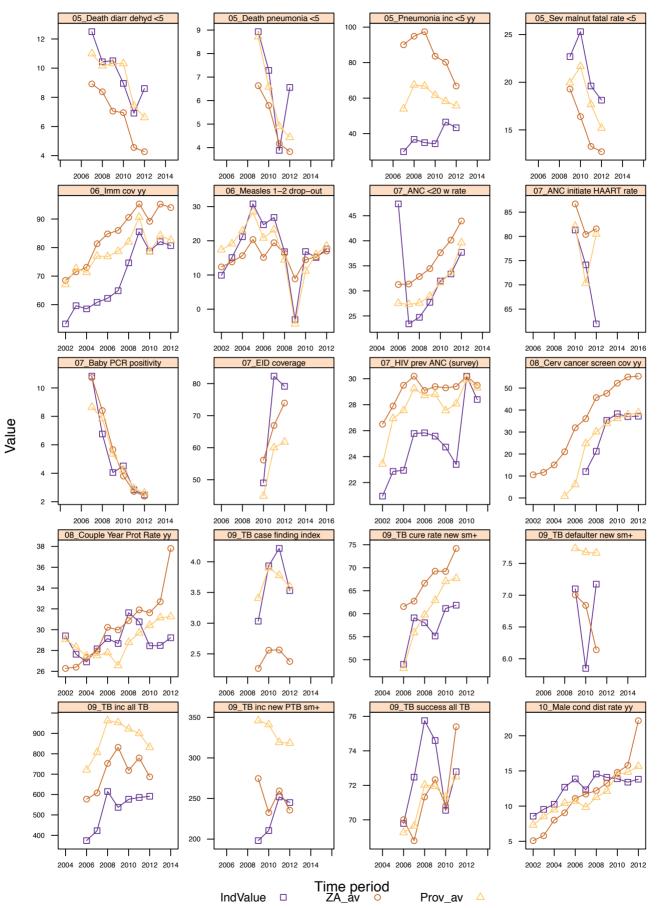
The TB incidence (all cases) was 591.5 per 100 000 people. This was well below the provincial and national averages of 831.7 and 687.3 per 100 000 people respectively. The TB case finding index was 3.5%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 521 in 2011 to 2 440, resulting in a TB incidence (new pulmonary smear-positive) of 245.1 per 100 000 people. This was the lowest in the province but above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 61.8%, the second lowest rate in the province. The new TB (new pulmonary smear-positive) defaulter rate was 7.2% and above the national rate of 6.1%, and the TB treatment success rate (all TB) was 72.8%.

The male condom distribution coverage remained stable at 13.8 condoms per male 15 years and older. This coverage was, however, still below the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 22 180 at the end of 2011/12 to 27 975 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 606 to 1 985 in the same period.



#### Annual indicators for district: Amathole: DC12

#### Annual indicators for district: Amathole: DC12



# **Chris Hani District Municipality**

## Naomi Massyn

Chris Hani District in the Eastern Cape has an estimated medical scheme coverage of 5.9%.

The proportion of district health services expenditure on district management decreased from 10.7% in 2011/12 to 8.5% in 2012/13. However, it was still above the provincial average of 7.2%. The proportion of total district expenditure on PHC increased from 45.1% to 48.3% in the same period. The percentage expenditure on district hospital services was 43.1%.

At 76.6%, the PHC supervisor visit rate (fixed clinic/CHC/CDC) was in line with the national average of 76.0%.

At 59.2%, the inpatient bed utilisation rate was the lowest in the province and well below the national (67.3%) rate. The average length of stay remained stable at 4.5 days. The expenditure per patient day equivalent of R1 594 was below the provincial (R1 730) and the national (R1 823) averages. The ratio of ambulatory to inpatient days was 0.9, and indicates that more patients are admitted as inpatients than are seen at the emergency units and/or the outpatient departments. The OPD new client not referred rate was 78.0%, the highest in the province and well above the national (64.1%) rate. This indicates that a large proportion of patients seen at the emergency units and/or the outpatient departments are bypassing PHC facilities and accessing district hospitals directly.

The delivery by Caesarean section rate was 13.9%, the third lowest in the province. The delivery in facility under 18 years rate remained stable at 10.5% and as such, above the national rate of 7.7%. The facility maternal mortality ratio increased from 118.8 per 100 000 live births to 162.3 per 100 000 live births. The stillbirth in facility rate was 20.5 per 1 000 births, and was slightly below the national rate of 21.8 per 1 000 births. At 10.2 per 1 000 live births, the inpatient early neonatal death rate was on par with the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 52.1% and was the second highest in the province and well above the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed a slight decrease in the HIV prevalence among antenatal clients tested from 30.1% in 2010 to 29.5% in 2011, but no clear trend is evident. The antenatal client initiated on ART rate of 92.6% was the second highest in the province and well above the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 67.0% and increased from the 64.8% in 2011/12. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.6% was in line with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.5%.

The immunisation coverage under 1 year was 96.0% and the measles 1st to 2nd dose drop-out rate was 14.8%.

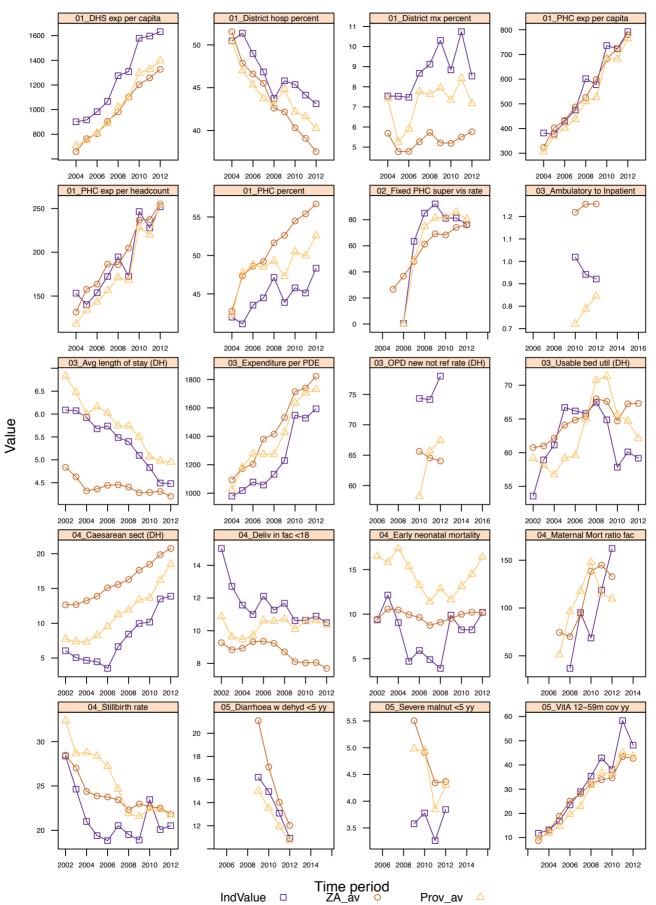
The child under 5 years diarrhoea with dehydration incidence was 10.9 episodes per 1 000 children, and the child under 5 years diarrhoea case fatality rate was 5.3%, slightly higher than the national rate of 4.3%. The child under 5 years pneumonia incidence decreased slightly from 75.5 cases per 1 000 children in 2011/12 to 73.0; this was the second highest in the province and above the national (66.8 per 1 000) incidence. The child under 5 years pneumonia case fatality rate was 4.0%. The child under 5 years severe acute malnutrition incidence was 3.8 cases per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate was 17.0%. This was well above the national rate of 12.7%. The vitamin A coverage 12 to 59 months was 48.2%.

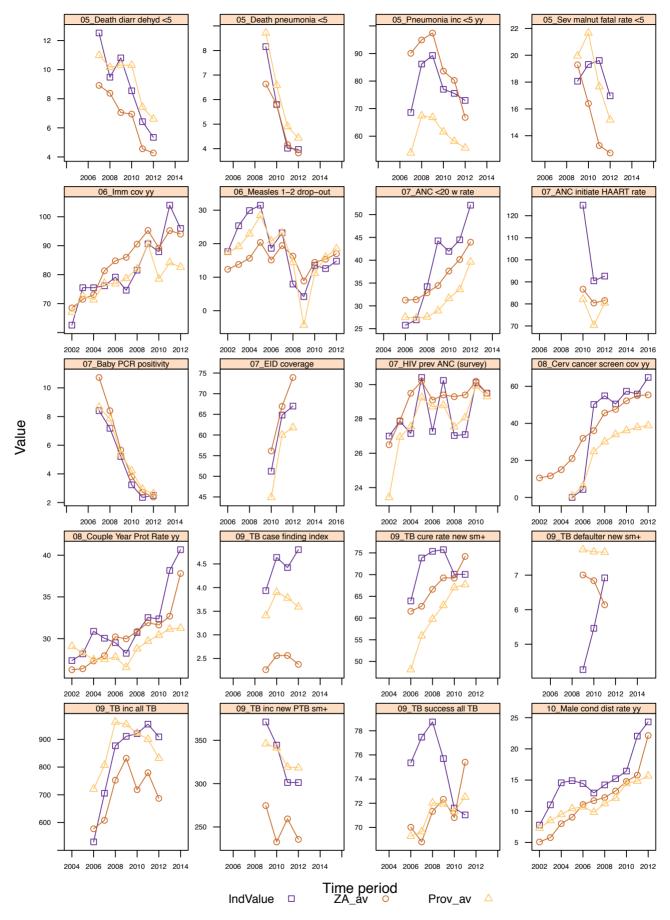
The cervical cancer screening coverage of 64.8% was the highest in the province. The couple year protection rate has increased over the past two years due to increases in condom distribution, and was 40.7% in 2012/13, just above the national rate of 37.8%.

The TB incidence (all cases) was 908.9 per 100 000 people, and was well above the provincial and national averages of 831.7 and 687.3 per 100 000 people respectively. The TB case finding index was 4.8%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased slightly from 2 329 in 2011 to 2 319. The TB incidence (new pulmonary smear-positive) remained stable at 301.2 per 100 000 people, and was above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 70.1% for the past two years. The new TB (new pulmonary smear-positive) defaulter rate was 6.9% and above the national rate of 6.1%. The TB treatment success rate (all TB) was 71.0%.

The male condom distribution coverage increased from 16.4 in 2010/11 to 24.3 condoms per male 15 years and older; this was the highest in the province and above the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 18 493 at the end of 2011/12 to 25 863 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 308 to 1 708 in the same period.

#### Annual indicators for district: Chris Hani: DC13





#### Annual indicators for district: Chris Hani: DC13

# Joe Gqabi District Municipality

## Naomi Massyn

Joe Gqabi District in the Eastern Cape has an estimated medical scheme coverage of 5.0%.

The proportion of district health services expenditure on district management dropped from 13.2% in 2011/12 to 10.7% in 2012/13. However, this was still well above the provincial average of 7.2% and the national average of 5.8%. The proportion of total district expenditure on primary health care (PHC) increased from 31.7% to 34.8% in the same period, but this was the lowest proportion in the province and well below the national average of 56.7%. The percentage expenditure on district hospitals, of which there are 11 in the district, was 54.5% – the highest proportion provincially.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 83.2% and well above the national average of 76.0%.

The inpatient bed utilisation rate has declined to 68.5%, in line with the national (67.3%) rate. The average length of stay has been fluctuating between 5.3 and 5.9 days over the past eight years, and was 5.3 days in 2012/13. The expenditure per patient day equivalent was R1 912, the second highest in the province and above the national average of R1 823. The ratio of ambulatory to inpatient days increased from 0.5 to 0.8. The OPD new client not referred rate was 76.0%, the second highest in the province and well above the national (64.1%) rate. This indicates that a high proportion of patients seen at the emergency units and/or the outpatient departments, bypass PHC facilities and access the district hospitals directly.

The delivery by Caesarean section rate remained stable at 10.3% and was the lowest in the province, and also well below the national rate of 20.8%. The delivery in facility under 18 years rate was 10.9% and above the national rate of 7.7%. The facility maternal mortality ratio increased from 121.0 per 100 000 live births in 2011/12 to 140.3, and was above the national ratio of 132.9 per 100 000. The stillbirth in facility rate was the second lowest in the province at 17.6 per 1 000 births and the long-term trend suggests that this rate is declining. The inpatient early neonatal death rate was 10.0 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 44.0%, an increased from 40.4% in 2011/12 and on par with the national rate. The 2011 National Antenatal Sero-prevalence Survey showed that the HIV prevalence was 29.9%, the second highest in the province. The antenatal client initiated on ART rate was 77.6% and increased from 66.7% in 2011/12. This was, however, still well below the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage of 86.2% was the highest provincially and well above the national coverage of 73.9%. The NHLS infant 1st PCR test positive for infants under two months of age at 1.7% was in line with the results from the DHIS for PCR test positive around 6 weeks rate of 1.6%, making Joe Gqabi the fifth best performing district regarding prevention of HIV transmission to infants.

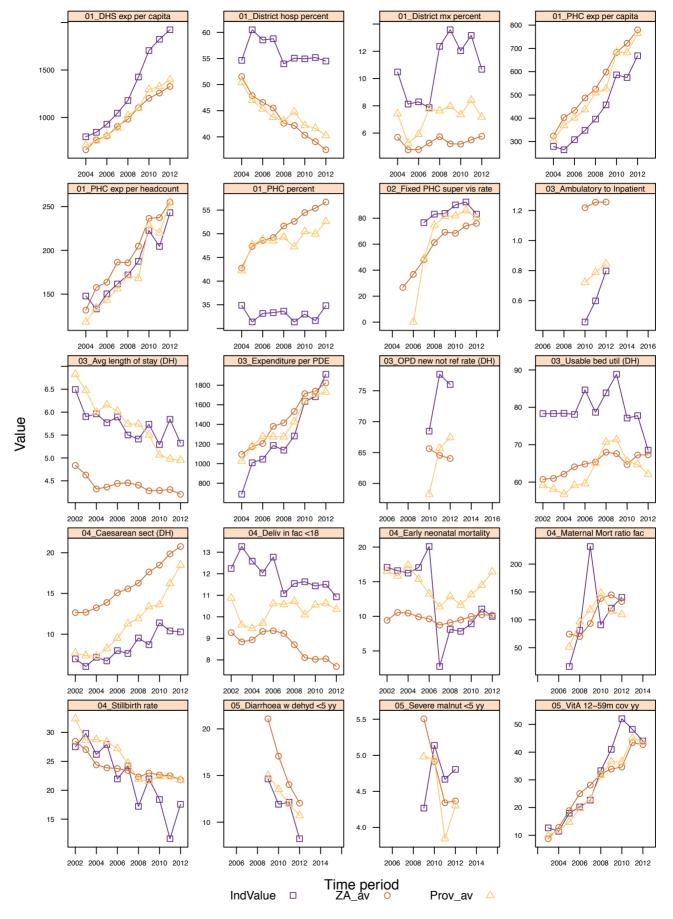
The immunisation coverage under 1 year of 98.4% was the second best provincially and was above the national coverage of 94.0%. The measles 1st to 2nd dose drop-out rate was 17.8%, at the same level as the national rate of 17.0%.

At 8.2 episodes per 1 000 children, the child under 5 years diarrhoea with dehydration incidence was the second lowest in the province and decreased from 12.1 per 1 000 in 2011/12. The child under 5 years diarrhoea case fatality rate was 6.4%, and above the national rate of 4.3%. The child under 5 years pneumonia incidence was 52.2 cases per 1 000 children and was below the national (66.8) incidence, whilst the child under 5 years pneumonia case fatality rate at 9.3% was the highest in the province. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 000 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 000 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children. The child under 5 years severe acute malnutrition incidence was 4.8 per 1 0.00 children acute malnutrition incidence was 4.8 per 1 0.00 children acute malnutrition incidence was 4.8 per 1 0.00 children acute malnutrition incidence was 4.8 per 1 0.00 children acute malnutrition incidence was 4.8 p

The cervical cancer screening coverage of 56.2% was the second highest in the province and increased from 48.5% in 2011/12. At 38.3%, the couple year protection rate was seven percentage points higher than the provincial rate.

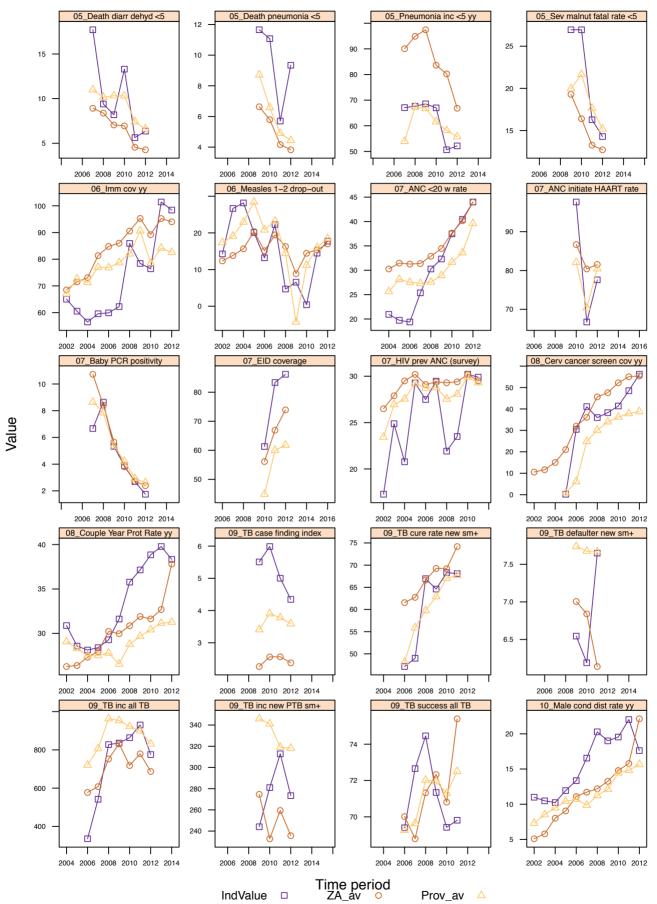
The TB incidence (all cases) was 775.5 per 100 000 people, and was below the provincial average of 831.7 per 100 000 people. The TB case finding index was 4.3%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 052 in 2011 to 916, resulting in a decrease in the TB incidence (new pulmonary smear-positive) from 312.9 per 100 000 people to 273.4, but still above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 68.1% and the TB (new pulmonary smear-positive) defaulter rate was 7.6%, above the national rate of 6.1%. The TB treatment success rate (all TB) remained stable at 69.8%.

The male condom distribution coverage decreased from 22.0 condoms per male 15 years and older in 2011/12 to 17.6 condoms, below the national coverage of 22.1 condoms. The total number of adults remaining on ART increased from 10 473 at the end of 2011/12 to 12 865 by the end of 2012/13. The total number of children under 15 years remaining on ART also increased from 812 to 908 in the same period.



#### Annual indicators for district: Joe Gqabi: DC14

#### Annual indicators for district: Joe Gqabi: DC14



## **OR Tambo District Municipality**

### Vuyokazi Ntshakaza

OR Tambo District is the largest in the Eastern Cape and has an estimated medical scheme coverage of 4.6%. The district is also one of the 11 National Health Insurance (NHI) pilot districts.

The proportion of district expenditure on primary health care (PHC) was 55.9%, with the proportion of district health services expenditure on district management at 6.9%. The proportion of district expenditure on district hospitals remained stable at 37.1%, similar to the provincial average of 40.2% and the national average of 37.5%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) rate of 83.5% was above the provincial (80.5%) and the national (76.0%) averages.

The inpatient bed utilisation rate was 59.4% and below the national average of 67.3%. The average length of stay has almost halved since 2002/03 to 5.5 days in 2012/13, while the average expenditure per patient day equivalent was R1 645. The ratio of ambulatory to inpatient days was 0.8, and indicates that more patients are admitted as inpatients than are seen at the emergency units and/or the outpatient departments. The OPD new client not referred rate was 48.1% and was below the provincial (67.4%) and national (64.1%) rates. This indicates that a relatively lower percentage of clients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate has increased annually from 12.2% in 2010/11 to 18.8% in 2012/13. The delivery in facility under 18 years rate was 12.9%, well above the national rate of 7.7%. The maternal mortality ratio in facility decreased from 88.8 per 100 000 live births in 2011/12 to 68.5 per 100 000 live births in 2012/13. The stillbirth in facility rate was 28.4 per 1 000 births, the second highest nationally; the district has also ranked as having the highest stillbirth in facility rate in the province for the past six years. The inpatient early neonatal death rate of 20.3 per 1 000 live births is the second highest among the NHI districts.

The antenatal 1st visit before 20 weeks rate increased from 19.5% in 2009/10 to 31.5% in 2012/13. This was, however, the lowest in the province, below the national average of 44.0%, and the lowest among the NHI districts. The 2011 National Antenatal Sero-prevalence Survey shows a drop in the HIV prevalence among antenatal clients tested, from 31.3% in 2010 to 28.4% in 2011. The antenatal client initiated on ART rate increased to 86.2% in 2012/13, a huge improvement from 58.8% in 2011/12. This was also above the national average of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage increased from 38.4% in 2010/11 to 60.3% in 2012/13. However, this was well below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) was 3.4%, a decrease from 10.5% in 2008/09, but above the national average of 2.5%. This was just below the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 3.7%. Both data sources therefore indicate high levels of HIV transmission to infants, in excess of the target of 3.0%.

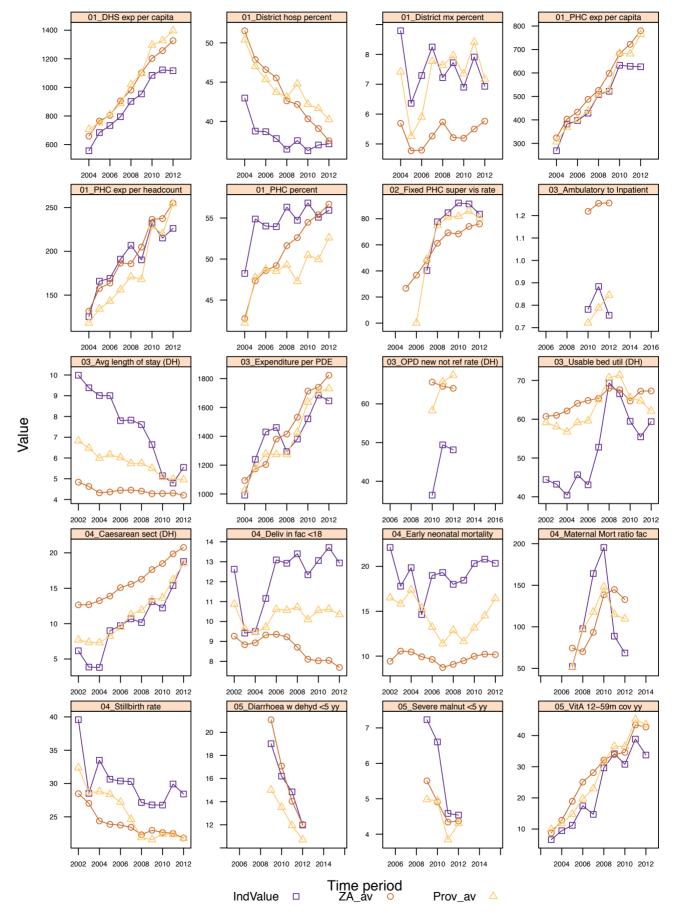
The immunisation coverage under 1 year decreased from 90.3% in 2011/12 to 73.6% in 2012/13. It was the fourth lowest in the country and the second lowest among the NHI districts. The measles 1st to 2nd dose drop-out rate was 27.3%, the poorest in the country.

The child under 5 years diarrhoea with dehydration incidence decreased from 19.0 episodes per 1 000 children under 5 years in 2009/10 to 12.0 in 2012/13, and was on par with the national incidence of 12.0 episodes per 1 000 children. At 15.1%, the child under 5 years diarrhoea case fatality rate was the highest in the province and the country. However, this rate has decreased annually over the years since 2008/09 when it was 25.2%. The child under 5 years pneumonia incidence increased from 44.2 cases per 1 000 children in 2011/12 to 45.0, and the child under 5 years pneumonia case fatality rate was 8.6%, the fourth highest in the country and the highest among the 11 NHI districts. However, the rate has decreased annually since 2009/10 when it was 20.7%. The child under 5 years severe acute malnutrition incidence was 4.5 per 1 000 children. At 21.4%, the child under 5 years severe acute malnutrition case fatality rate was the highest in the province and the fifth highest in the country. The vitamin A coverage in children aged 12 to 59 months was 33.8%, the lowest in the province and lower than the national average of 42.8%.

At 24.1%, the cervical cancer screening coverage was the lowest in the province and the second lowest nationally. The couple year protection rate was 27.7%.

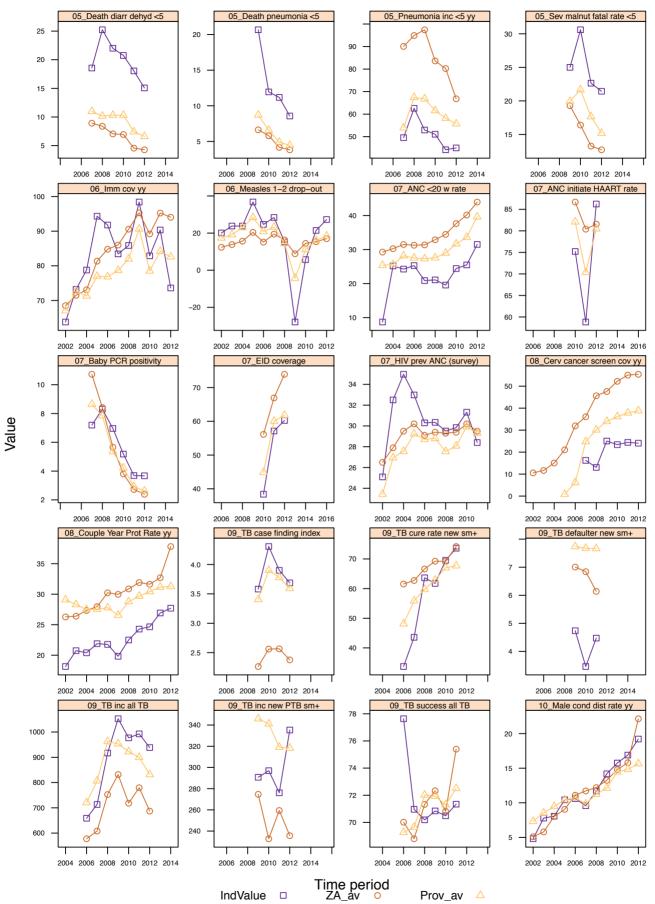
The TB incidence (all cases) was 938.6 per 100 000 people. This was well above the national average of 687.3 and the provincial incidence of 831.7, and was the second highest incidence among the NHI districts. The TB case finding index was 3.7%. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 3 737 in 2011 to 4 555, resulting in a TB incidence (new pulmonary smear-positive) of 335.3 per 100 000 people. The TB (new pulmonary smear-positive) cure rate increased annually from 61.8% in 2009 to 73.6% in 2011, but was still below the national rate of 74.2%. The new TB (new pulmonary smear-positive) defaulter rate was 4.5% and the lowest in the province, and the TB treatment success rate (all TB) was 71.3%.

The male condom distribution coverage was 19.2 condoms per male 15 years and older. The total number of adults remaining on ART at end of the month increased from 40 392 at the end of 2011/12 to 51 097 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 848 to 3 134 in the same period, and OR Tambo District had the most children on ART.



#### Annual indicators for district: OR Tambo: DC15

#### Annual indicators for district: OR Tambo: DC15



# Alfred Nzo District Municipality

## Vuyokazi Ntshakaza

Alfred Nzo District in the Eastern Cape has an estimated medical scheme coverage of 3.5%, the lowest in the country.

The proportion of district expenditure on primary health care (PHC) was 41.2%, with the proportion of district health services expenditure on district management at 6.1%. The proportion of district expenditure on district hospitals remained stable at 52.8% and was above the provincial average of 40.2% and the national average of 37.5%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC), at 86.4%, was above the provincial (80.5%) and national (76.0%) averages.

The inpatient bed utilisation rate was 66.2%, marginally below the national average of 67.3%. The average length of stay was 5.5 days, while the average expenditure per patient day equivalent (PDE) was R1 586. The ratio ambulatory to inpatient days was 1.1 and the OPD new client not referred rate was 62.4%. The latter indicates that a relatively higher percentage of clients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate has increased from 15.1% in 2010/11 to 18.5% in 2012/13. The delivery in facility under 18 years rate was 13.4%, the highest provincially and well above the national rate of 7.7%. The maternal mortality ratio in facility decreased from 153.7 per 100 000 live births in 2011/12 to 55.5 per 100 000 live births in 2012/13. The ratio has varied between 103.5 and 153.7 per 100 000 live births over the previous four years, and the decrease to 55.5 should be verified. The stillbirth in facility rate increased slightly from 17.3 per 1 000 births in 2011/12 to 18.1 per 1 000 births in 2012/13 – below the national average of 21.8 per 1 000 births. The inpatient early neonatal death rate of 10.9 per 1 000 live births was just above the national average of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased annually from 22.1% in 2009/10 to 32.6%. This was, however, below the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows a drop in the HIV prevalence among antenatal clients tested from 30.1% in 2010 to 28.9% in 2011. The antenatal client initiated on ART rate increased to 87.4% in 2012/13, a huge improvement from 68.3% in 2011/12, and also above the national average of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage increased from 28.6% in 2010/11 to 33.2% in 2012/13, but was the lowest in the country, well below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate was 3.6% (DHIS data), a decrease from 8.7% in 2009/10. It was, however, above the national average of 2.5%, and was also above the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.8%.

The immunisation coverage under 1 year increased from 55.2% in 2011/12 to 69.7% in 2012/13, but was well below the national average of 94.0%. The measles 1st to 2nd dose drop-out rate was 17.9%, the second highest provincially and above the national average of 17.0%.

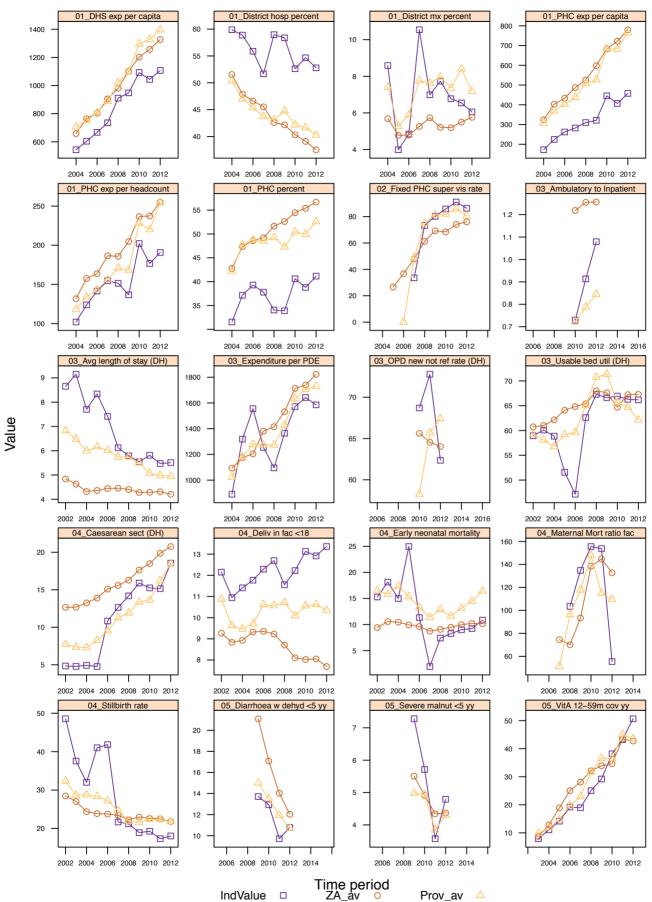
The child under 5 years diarrhoea with dehydration incidence decreased from 13.7 episodes per 1 000 children in 2009/10 to 9.7 episodes per 1 000 children in the following years, and then increased to 10.8 in 2012/13. At 11.6%, the child under 5 years diarrhoea case fatality rate was the second highest in the province and the country. However, this rate has decreased annually since 2010/11 when it was 21.2%. The child under 5 years pneumonia incidence decreased from 79.6 cases per 1 000 children in 2009/10 to 44.1, and the child under 5 years pneumonia case fatality rate was 8.2%, the third highest in the province. The child under 5 years severe acute malnutrition incidence was 4.8 cases per 1 000 children, while the child under 5 years severe acute malnutrition incidence was 4.8 cases per 1 000 children aged 12 to 59 months was 50.7%, the second highest in the province and higher than the national average of 42.8%.

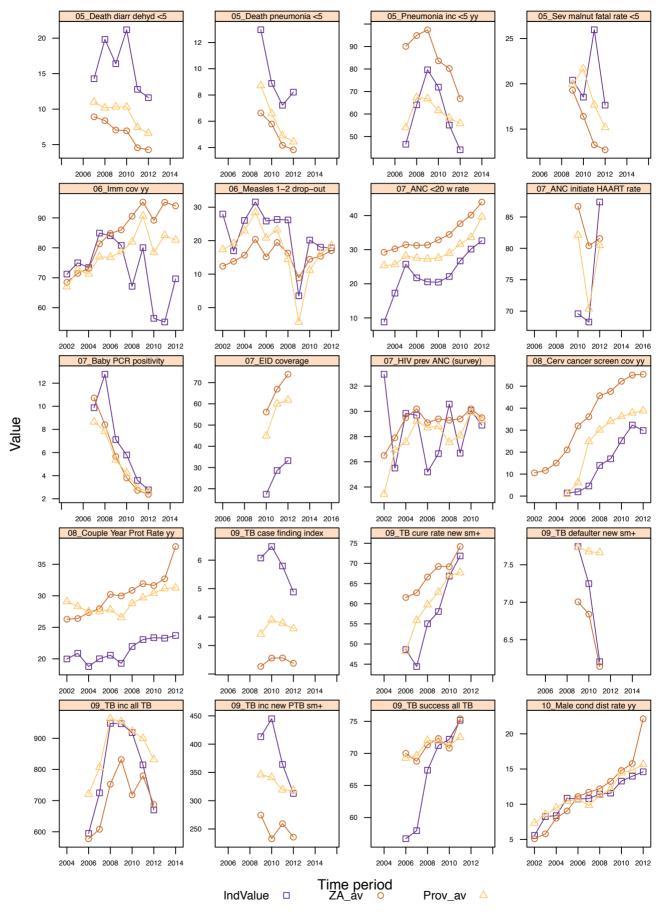
At 29.8%, the cervical cancer screening coverage was the second lowest in the province and decreased from 32.3% in 2011/12. The couple year protection rate was 23.7%, being the lowest provincially and well below the national rate of 37.8%.

The TB incidence (all cases) was 670 per 100 000 people and below the national incidence of 687.3 and the provincial incidence of 831.7. The TB case finding index was 4.9%, the highest in the province. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 924 in 2011 to 2 523, thus the TB incidence (new pulmonary smear-positive) decreased from 364.2 per 100 000 to 312.8 in the same period. The TB (new pulmonary smear-positive) cure rate increased annually from 44.4% in 2007 to 71.9% in 2011, but was still below the national rate of 74.2%. The TB (new pulmonary smear-positive) defaulter rate was 6.2%, the second lowest in the province. The TB treatment success rate (all TB) was 75.2%.

The male condom distribution coverage was 14.6 condoms per male 15 years and older, below the provincial coverage of 15.7 condoms and the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 23 711 at the end of 2011/12 to 28 079 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 717 to 2 612 in the same period.







#### Annual indicators for district: Alfred Nzo: DC44

## Nelson Mandela Bay Metropolitan Municipality

## Naomi Massyn

Nelson Mandela Bay Metropolitan District in the Eastern Cape has an estimated medical scheme coverage of 29.4%, the highest in the province.

At 4.4%, the proportion of district health services expenditure on district management was the lowest in the province. The proportion of total district expenditure on primary health care (PHC) was the second highest in the province at 71.7%, and well above the national average of 56.7%. The percentage expenditure on district hospital services was 23.9% and the second lowest percentage provincially.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was the lowest in the province at 63.8% and well below the national average of 76.0%.

The inpatient bed utilisation rate was 67.1% and in line with the national (67.3%) rate. The average length of stay was one of the shortest in the province at 3.6 days. The expenditure per patient day equivalent at R2 573 was the highest in the province and well above the national average of R1 823. The ratio of ambulatory to inpatient days was 0.6 and this indicates that substantially more patients are admitted as inpatients than are seen at the emergency units and/or the outpatient departments (OPD). The OPD new client not referred rate was 22.3%, the lowest in the province and well below the national (64.1%) rate. This indicates that a low proportion of patients seen at the emergency units and/or the outpatient departments, bypass PHC facilities and access district hospitals directly.

At 40.1%, the delivery by Caesarean section rate remained the highest in the province and it was almost double the national rate of 20.8%. The delivery in facility under 18 years rate was 7.1% and just below the national rate of 7.7%. The facility maternal mortality ratio increased from 117.5 per 100 000 live births in 2011/12 to 126.0, but was below the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate was the lowest in the province at 16.8 per 1 000 births, and was below the national rate of 21.8 per 1 000 births. At 27.7 per 1 000 live births, the inpatient early neonatal death rate was the highest provincially and well above the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 46.3%, increasing from 41.2% in 2011/12 and was higher than the national rate of 44.0%. According to the 2011 National Antenatal Sero-prevalence Survey, the HIV prevalence among antenatal clients tested was 28.3%, the second lowest in the province. At 94.6%, the antenatal client initiated on ART rate was the highest in the province and increased from 76.9% in 2011/12, also being well above the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 62.3% and had increased from 58.0% in 2011/12. However, it was still well below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.5% was in line with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.6%.

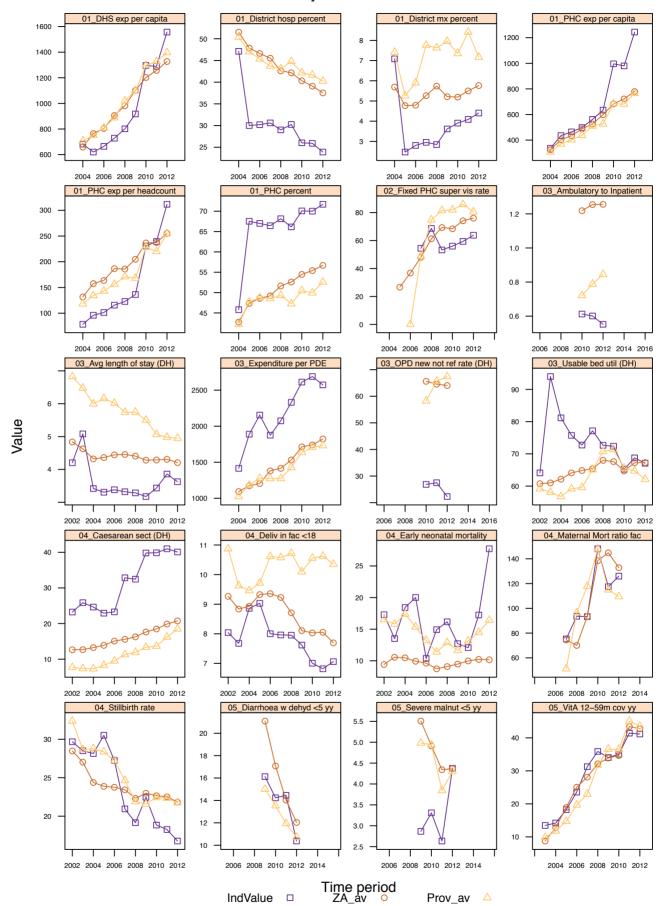
The immunisation coverage under 1 year was 84.8% and below the national coverage of 94.0%. The measles 1st to 2nd dose drop-out rate was 14.3% and below the national rate of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was 10.4 episodes per 1 000 children, having decreased from 14.5 per 1 000 children in 2011/12. The child under 5 years diarrhoea case fatality rate was 3.0%. This was the second lowest in the province and below the national rate of 4.3%. The child under 5 years pneumonia incidence was 65.3 cases per 1 000 children, decreasing from 68.6 in 2011/12. The child under 5 years pneumonia case fatality rate was 3.4% and in line with the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence was 4.4 cases per 1 000 children, whilst the child under 5 years severe acute malnutrition case fatality rate decreased from 12.1% in 2011/12 to 5.1%, which was below the 2012/13 national rate of 12.7%. The vitamin A coverage 12 to 59 months was 41.2%.

The cervical cancer screening coverage was 45.6% and the couple year protection rate was 35.2%.

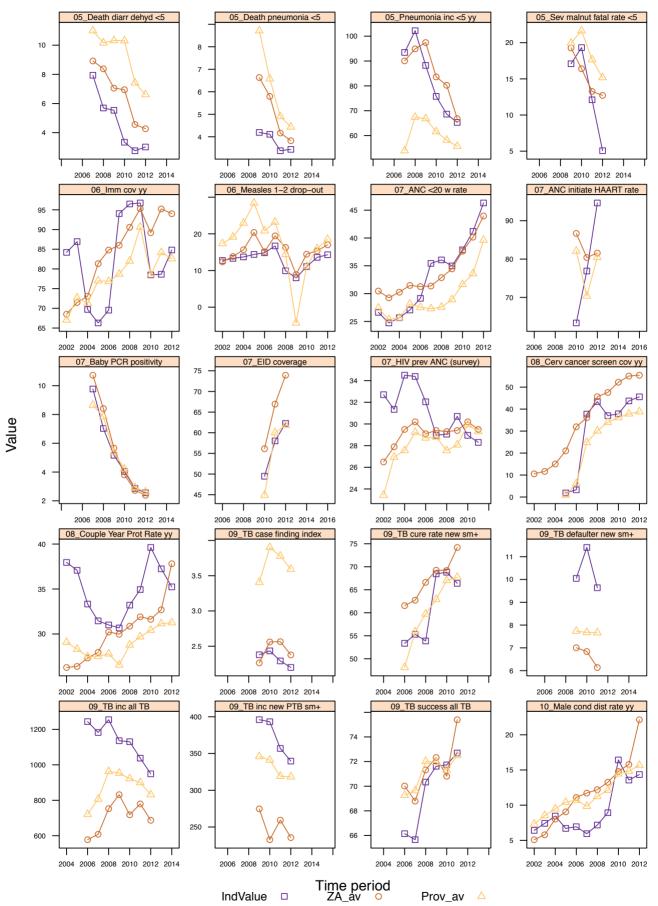
The TB incidence (all cases) was 949.3 per 100 000 people. This was above the provincial and national averages of 831.7 and 687.3 per 100 000 people respectively. The TB case finding index was 2.2% and the lowest in the province. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 4 105 in 2011/12 to 3 941 in 2012/13, resulting in a decrease of the TB incidence (new pulmonary smear-positive) from 356.9 per 100 000 people in 2011/12 to 339.7. This was, however, still above the national incidence of 235.7 per 100 000 people. The TB cure rate (new pulmonary smear-positive) was 66.4% and the TB defaulter rate (new pulmonary smear-positive) 9.6%. The defaulter rate was above the national rate of 6.1%. The TB treatment success rate (all TB) was 72.7%.

The male condom distribution coverage was 14.4 condoms per male 15 years and older. This was well below the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased by 10 000, from 28 038 at the end of 2011/12 to 38 022 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 2 296 to 2 486 in the same period.



#### Annual indicators for district: Nelson Mandela Bay: NMA

## Annual indicators for district: Nelson Mandela Bay: NMA



# **13 Free State Province**

# **Xhariep District Municipality**

Xhariep District is geographically the largest of Free State Province's five districts. The proportion of the district's population with medical aid coverage is 9.7%.

The proportion of district health services expenditure on Xhariep district hospitals was 23.1%, which was the lowest in the province; since the national average was 37.5%, this figure ranks Xhariep as the sixth lowest in the country. The 6.7% of district health services expenditure on Xhariep's district management in 2012/13 was higher than the provincial average of 3.9%. This value was also higher than the national average and has been increasing gradually from 4.0% since 2008/09. The proportion of total district health services expenditure on primary health care (PHC) in the district was 70.3%, and although this reflects a slight decrease from 2011/12 (71.2%), it is still the highest in the province and higher than the national average to the district's rural setting and the fact that the three district hospitals in Xhariep do not appear to offer the full complement of first-level hospital services.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) of 82.1%, which is higher than the national average of 76.0%, is an increase from the previous financial year's value of 77.0%. This improvement has been noted as a common pattern across the districts in the Free State from 2005/06.

The inpatient bed utilisation rate was 70.2% in 2012/13, but this has fluctuated substantially over the past 10 years. This could be caused by a data quality error in the hospital data system, or be directly related to the geographical setting of the district having only three district hospitals. The 2.1 days' average length of stay was shorter than the national average of 4.2 days and the second shortest in the country. The expenditure per patient day equivalent was R1 894, having increased from R1 470 in 2009/10. The ratio of ambulatory to inpatient days was 0.7, which was almost half of the provincial and national ratios of 1.5 and 1.3 respectively. A ratio below one means that fewer clients are seen at the emergency unit/OPD clinics than are admitted into hospital. For Xhariep District, this ratio has been decreasing from 2010/11 when it was 1.2 but is in line with the inpatient bed utilisation rate seen above. The OPD new client not referred rate of 25.8% was lower than both the provincial and national averages of 60.0% and 64.1% respectively. This indicates that a low proportion of patients seen at the emergency units and/or the outpatient departments, bypass PHC facilities and access district hospitals directly.

When interpreting the inpatient and delivery indicators, it should be noted that Xhariep District has the lowest number of usable beds per 1 000 people in the country (0.44). It appears that only about 100 deliveries per month take place in the district and presumably patients travel to Mangaung or other surrounding areas. For this reason, many of the indicators may fluctuate and might not constitute a reliable indication of health services and health outcomes in this district.

The delivery in facility under 18 years rate was 9.4%, which has been the highest in the province since 2004/05. For the past seven years, there has been no delivery by Caesarean section taking place in Xhariep District. This factor greatly influences some of the district's postnatal and PMTCT indicators such as PCR coverage. Due to the rural setting of the district and there being only three district hospitals, almost all Caesarean sections take place in the surrounding provinces with which Xhariep shares borders, or in the neighbouring Mangaung Metro District. The stillbirth in-facility rate was 14.6 per 1 000 births, the lowest in the province, and this has been sustained for the past 10 years. The inpatient early neonatal death rate follows the same pattern as the stillbirth in-facility rate, having dropped gradually from 10.4 per 1 000 live births in 2002/03 to 3.7 in 2012/13. The facility maternal mortality ratio was 0.0 per 100 000 live births, although DHIS and National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD) ratios for previous years have given rates above 200 and up to 581.

The antenatal 1st visit before 20 weeks rate increased from 56.7% in 2011/12 to 62.8% in 2012/13. As in the previous 10 years, it was still the highest in the province and well above the 2012/13 national average of 44.0%. According to the 2011 National Antenatal Sero-prevalence Survey, HIV prevalence among antenatal clients tested was 26.1%, an increase from 21.8% in 2010. The antenatal client initiated on ART rate of 85.6% was four percentage points higher than the national average.

Data from the National Health Laboratory Services (NHLS) shows that the early infant HIV diagnosis coverage was 148.5%. This figure was more than 100% for the past three years.<sup>a</sup> The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was 1.9%, the lowest in the province and below the national average of 2.4%. It was much lower than the infant 1st PCR test positive around 6 weeks rate (DHIS data) of 3.7%.

## Njabulo Mbanda

a These large percentages are probably due to small numbers and the numerator and denominator being collected by independent data systems. Many babies are born in other districts, so their births are not registered in Xhariep District, but testing for PCR six weeks later is likely to take place in PHC facilities in the district.

The immunisation coverage under 1 year has dropped from 89.7% in 2011/12 to 80.2% in 2012/13. The measles 1st to 2nd dose drop-out rate, on the other hand, picked up from 2.0% in 2011/12 to 9.8% in 2012/13, but still remains the sixth lowest in the country.

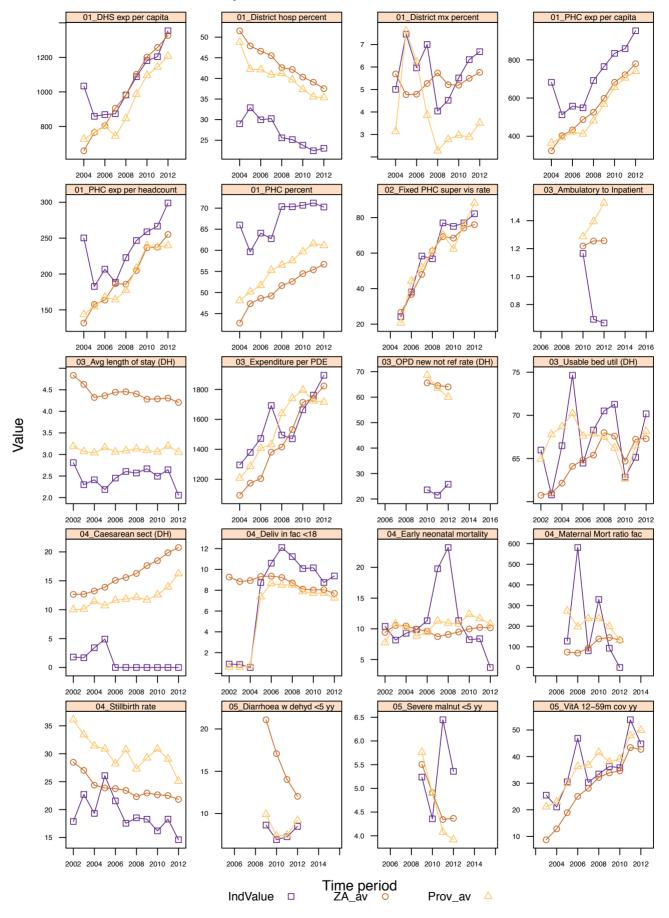
The child under 5 years diarrhoea with dehydration incidence was 8.5 episodes per 1 000 children. Xhariep District has succeeded in staying well below the national average of 12.0 episodes per 1 000 children under 5 years. The child under 5 years diarrhoea case fatality rate was 2.5% and decreased since 2009/10 when it was 20.6%.<sup>b</sup> The child under 5 years pneumonia incidence was 101.1 cases per 1 000 children, and has been the highest in the province from 2006/07. The child under 5 years severe acute malnutrition incidence rate was 4.9%, which is higher than the provincial average of 3.5%. The child under 5 years severe acute malnutrition incidence rate was 5.4 cases per 1 000 children making it the highest in the province and higher than the national average of 4.4%. The child under 5 years severe acute malnutrition case fatality rate was 3.2%. This rate was the second lowest in the country, but has fluctuated widely. The vitamin A coverage 12 to 59 months rate has decreased from 53.9% in 2011/12 to 44.8% in 2012/13. However, this rate was still higher than the national average of 42.8%.

The cervical cancer screening coverage was 53.8% and just below the national coverage of 55.4%. The couple year protection rate increased by 5.1 percentage points from 33.7% in 2011/12 to 38.8% in 2012/13.

The TB incidence (all cases) of 819.4 per 100 000 people was the lowest incidence since 2008. However, it was still above the national incidence of 687.3 per 100 000 people. The TB case finding index was 2.7%, much higher than the provincial and national averages. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 592 in 2011 to 511. The TB incidence (new pulmonary smear-positive) therefore decreased from 339.9 per 100 000 people to 292.4 per 100 000 people, but was above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate increased from 73.3% in 2010 to 78.7%, being the highest in the province in 2011. The new TB (new pulmonary smear-positive) defaulter rate was 3.5%. The TB treatment success rate (all TB) of 79.4% was also the highest in the province and above the national rate of 75.4%.

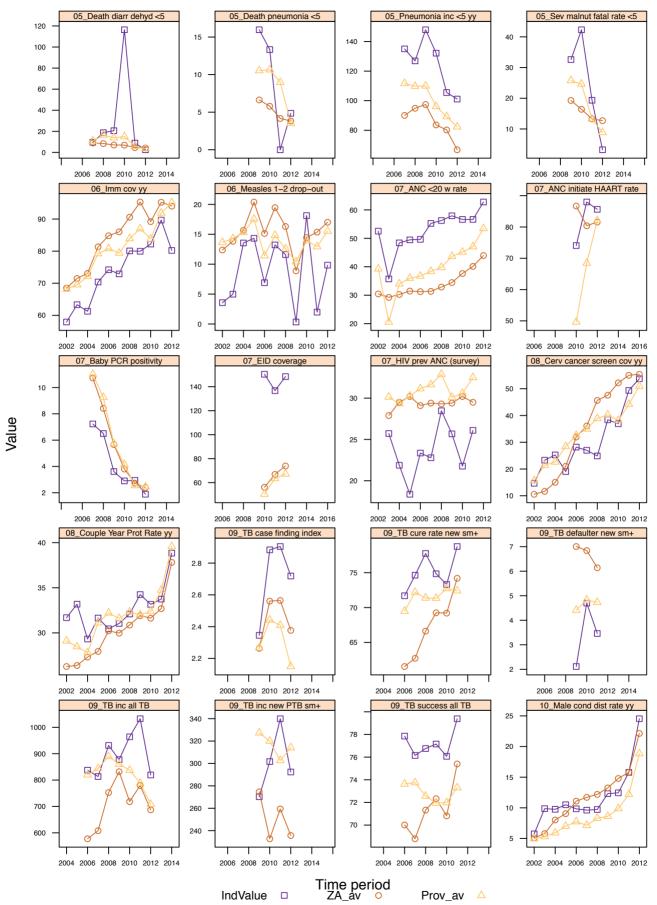
The male condom distribution coverage was second highest in the province at 24.5 condoms per male 15 years and older. The total for adults remaining on ART at end of the month by the end of 2012/13 was 7 138 adults, whilst the total for children under 15 years remaining on ART at end of the month was 540. Both these values are the lowest in the province due to Xhariep District's smaller population, hence the numbers of patients on ART. The district has data for 2012/13 only.

b The spike of 116.4% in 2010/11 appears to be a data error with 43 deaths recorded at a clinic, but no admissions for severe diarrhoea (denominator).



#### Annual indicators for district: Xhariep: DC16

#### Annual indicators for district: Xhariep: DC16



# Lejweleputswa District Municipality

## Lehlohonolo Mokoena

Lejweleputswa District is located in north-western Free State. The proportion of the population with medical aid coverage is estimated to be 18.1%.

The proportion of district health services expenditure on district management was 3.4%, the highest since 2008/09. The proportion of district health services expenditure on district hospitals was 30.4%, on par with the national average of 30.4% and slightly below the provincial average of 37.3%. The proportion of district health services expenditure on primary health care (PHC) was 66.2%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) improved from 49.9% in 2010/11 to 90.4% in 2012/13 and is the third highest in the province, above the provincial and national averages of 88.2% and 76.0% respectively.

The inpatient bed utilisation rate decreased from 61.8% in 2011/12 to 55.9% in 2012/13, the second lowest in the province and below the national rate of 67.3%. The average length of stay, at 2.4 days, was shorter than the provincial average of 3.1 days, and has been below the provincial average for the past decade. The expenditure per patient day equivalent increased from R1 932 in 2011/12 to R2 035 in 2012/13. This was higher than both the national expenditure of R1 823 and the provincial expenditure of R1 714. The ratio of ambulatory to inpatient days was 1.3 and lower than the provincial ratio of 1.5. A ratio of more than one means that more clients are seen at the emergency unit/OPD clinics than are admitted in hospital. The OPD new client not referred rate has decreased from 82.2% in 2010/11 to 55.8%, the second lowest in the province and below the national rate 64.1%. However, this still indicates that more than half of all clients bypass the PHC facilities and access the district hospitals directly.

The delivery by Caesarean section rate of 13.4% was lower than the provincial average of 16.2% and the national average of 20.8%. Delivery in facility under 18 years rate was 6.8%. The facility maternal mortality ratio recorded at 159.2 per 100 000 live births decreased from 223.5 per 100 000 live births in 2011/12 but was, however, still higher than the provincial ratio of 132.7 and the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate decreased from 33.3% per 1 000 births in 2011/12 to 26.7% in 2012/13; however, it was the highest in the province and above the national average of 21.8%. Although the inpatient early neonatal death rate has decreased from 15.3 per 1 000 live births, this is above both the provincial and national averages that are at 10.8 and 10.2 per 1 000 live births respectively, and is the eleventh highest in the country.

Antenatal 1st visit before 20 weeks rate improved from 49.3% in 2011/12 to 55.2% in 2012/13. According to the 2011 Antenatal HIV Sero-prevalence Survey, the HIV prevalence among antenatal clients tested increased from 30.3% in 2010 to 34.2% in 2011. The ANC client initiated on ART rate has improved substantially from 50.6% in 2010/11 to 81.0% in 2012/13. According to the data from the National Health Laboratory Services (NHLS), the early infant HIV diagnosis coverage was 78.5% and the proportion of PCR tests HIV positive for infants under two months of age was 2.1%. This was, however, higher than the infant 1st PCR test positive around 6 weeks rate (DHIS data) of 1.7%.

Lejweleputswa District's immunisation coverage under 1 year was 87.4%, the second lowest in the province and below the national coverage of 94.0%. The measles 1st to 2nd dose drop-out rate was 14.2%.

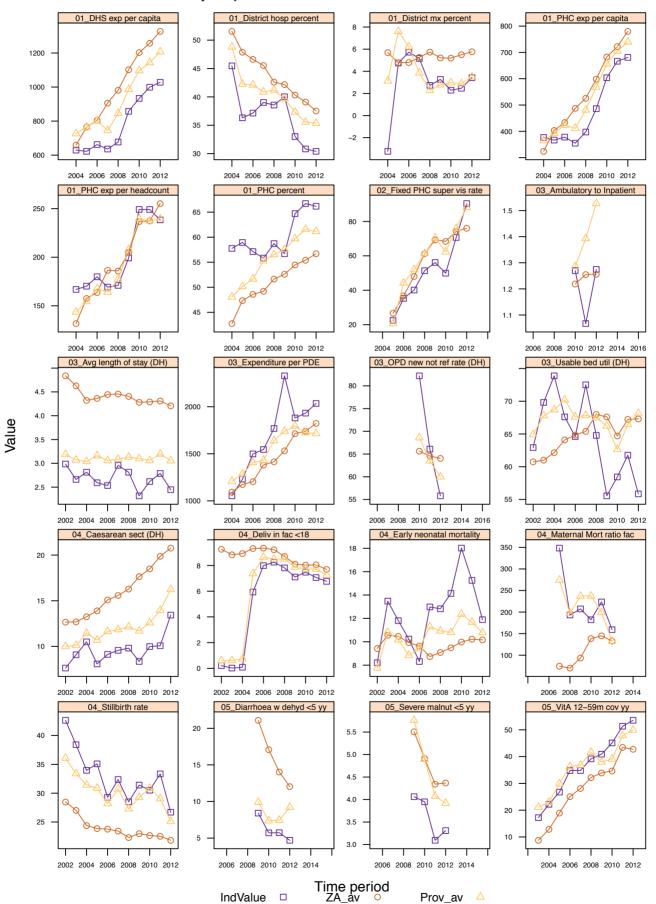
The child under 5 years diarrhoea with dehydration incidence decreased from 5.7 episodes per 1 000 children in 2011/12 to 4.7 episodes per 1 000 children in 2012/13, and is much lower than the national incidence of 12.0. The child under 5 years diarrhoea case fatality rate was 5.6% and the highest in the province, although it had declined three-fold over the past four years. The child under 5 years pneumonia incidence decreased from 72.6 cases per 1 000 children in 2011/12 to 62.6 cases per 1 000 children in 2012/13. The child under 5 years pneumonia case fatality rate decreased dramatically from 19.8% in 2009/10 to 3.7% in 2012/13 and was in line with the national average of 3.8%. The child under 5 years severe acute malnutrition incidence was at 3.3 cases per 1 000 children in 2012/13, and the child under 5 years severe acute malnutrition case fatality rate decreased from 17.7% in 2011/12 to 12.5% in 2012/13. Although this sustains the decreasing trend since 2009/10, it was the second highest in the province. Vitamin A coverage 12 to 59 months was 53.5% in 2012/13, and was higher than both the provincial coverage of 49.9% and the national coverage of 42.8%.

The cervical cancer screening coverage was 48.9% and the couple year protection rate was 43.2%.

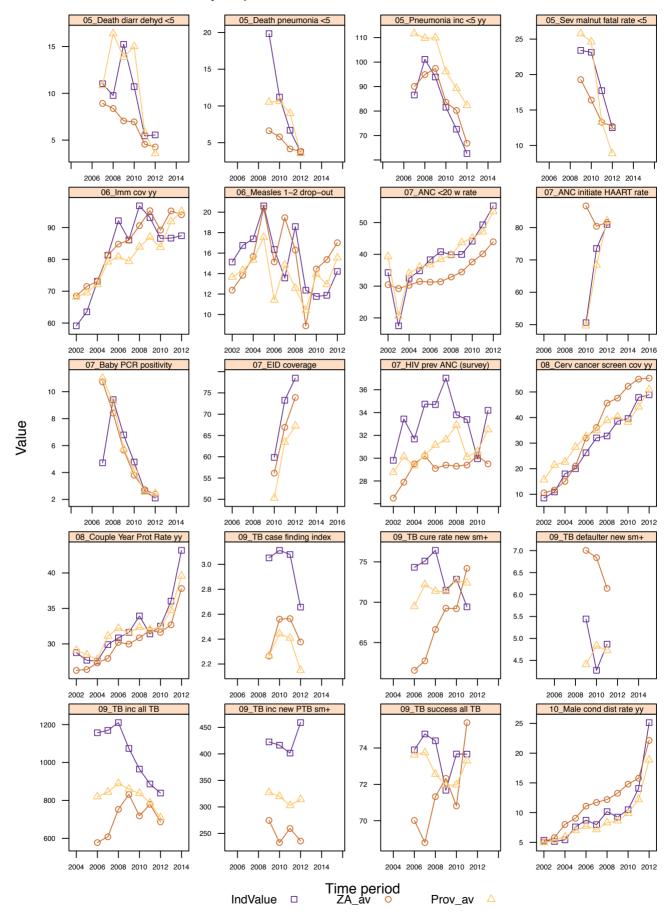
The TB incidence (all cases) was 838.8 per 100 000 people and was above the provincial and national averages of 708.5 and 687.3 per 100 000 people respectively. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 2 789 in 2011 to 3 189 in 2012/13. At 495.1 per 100 000 people, the TB incidence (new pulmonary smear-positive) was the highest provincially and well above the national incidence of 235.7. The TB case finding index was 2.7%, higher than the national average of 2.4%. The TB (new pulmonary smear-positive) cure rate decreased from 72.8% in 2010 to 69.4% in 2011 and was the second lowest in the province. The TB (new pulmonary smear-positive) defaulter rate was 4.9%, and the TB treatment success rate (all TB) was 73.7%.

The Lejweleputswa District's male condom distribution coverage increased from 14.1 condoms per male 15 years and older in 2011/12 to 25.1 in 2012/13. The total number of adults remaining on ART at end of the month increased significantly

from 1 527 at the end of 2011/12 to 29 646 at the end of 2012/13, and the child under 15 years remaining on ART at end of the month total increased from 206 to 2 073 in the same period.



Annual indicators for district: Lejweleputswa: DC18



#### Annual indicators for district: Lejweleputswa: DC18

# Thabo Mofutsanyane District Municipality

# Motshabi Modise

Thabo Mofutsanyane, a National Health Insurance (NHI) pilot site in the Free State Province, borders on Lesotho and KwaZulu-Natal and Mpumalanga provinces and has an estimated medical scheme coverage of 6.1%.

The proportion of total budget allocation of district health expenditure on primary health care (PHC) was 58.9%, while 4.6% was spent on district management. At 36.5%, the proportion of the district health services expenditure on district hospitals was the lowest since 2004/05, and was lower than the provincial average of 41.9% but similar to the national average of 37.5%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) remained high at 95.2% in 2012/13 and increased from 90.3% in 2011/12. This high rate was well above the provincial and national rates of 88.2% and 76% respectively, and ranks the seventh highest among districts in the country.

The inpatient bed utilisation rate was 54.3%, which was way below both the provincial (68.2%) and national (67.3%) rates. The average length of stay, at 2.7 days, was the fourth shortest in the country. Expenditure per patient day equivalent was R1 628, lower than both the national expenditure of R1 823 and the provincial expenditure of R1 714. The ratio of ambulatory to inpatient days at 2.5 was much higher than the provincial and national ratios of 1.5 and 1.3 respectively. This indicates that more patients are seen at the emergency units and/or the outpatient departments than patients admitted as inpatients. The outpatient department (OPD) new client not referred rate was 58.5%. This tendency indicated that just over 50% of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate at 10.1% was well below the provincial rate of 16.2% and the national rate of 20.8%, and the lowest among the NHI districts. Delivery in facility under 18 years rate was 8.1%. The facility maternal mortality ratio has decreased annually from 352.9 per 100 000 live births in 2009/10 to 157.5 per 100 000 live births in 2012/13. However, it was still the second highest among the districts in the province and well above the national ratio of 132.9. The stillbirth in facility rate has decreased annually from 33.9 per 1 000 births in 2009/10 to 24.7 in 2012/13. The inpatient early neonatal death rate increased from 8.4 per 1 000 live births in 2011/12 to 12.3 in 2012/13, which was slightly higher than the provincial and national rates of 10.8 and 10.2 per 1 000 live births respectively.

The antenatal 1st visit before 20 weeks rate was 52.8%. According to the National Antenatal Sero-prevalence Survey, the HIV prevalence among antenatal clients tested was 31.9% in 2011. The antenatal client initiated on ART rate increased from 41.1% in 2010/11 to 79.4% in 2012/13, which is in line the national average of 81.6%.

According to the data from the National Health Laboratory Services (NHLS), the early infant HIV diagnosis coverage was 69.3%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was the second highest in the province at 2.6%, although below the target of 3.0%. The value was higher in the DHIS data for the similar indicator of infant 1st PCR test positive around 6 weeks rate, at 2.1%.

Immunisation coverage under 1 year increased from 99.0% in 2011/12 to 107.4%<sup>a</sup> in 2012/13, thus ranking the district as highest in the province and above the national immunisation coverage of 94.0%. The measles 1st to 2nd dose drop-out rate increased annually over four years, from 9.3% in 2009/10 to 18.7% in 2012/13. It was the highest in the province and slightly higher than the national drop-out rate of 17.0%.

The child under 5 years diarrhoea with dehydration incidence increased over a four-year period from 6.1 episodes per 1 000 children in 2009/10 to 11.1 in 2012/13. The child under 5 years diarrhoea case fatality rate was 5.5% and the lowest since 2008/09 when it was 21.1%. However, it was still the second highest in the province and well above the national rate of 4.3%. Child under 5 years pneumonia incidence was 87.7 cases per 1 000 children and was higher than the provincial and national averages of 82.3 per 1 000 children and 66.8 per 1 000 children respectively. The child under 5 years pneumonia case fatality rate at 7.0% was the highest in the province and the second highest among the NHI districts. The child under 5 years severe acute malnutrition incidence of 4.4. The child under 5 years severe acute malnutrition case fatality rate at 23.3% was the second highest in the country. Vitamin A coverage 12 to 59 months was 52.8% and higher than the provincial (49.9%) and the national (42.8%) coverage.

The cervical cancer screening coverage increased from 34.3% in 2009/10 to 59.2% in 2012/13 and was the highest in the province. The couple year protection rate increased from 33.9% to 42.4% in the same period.

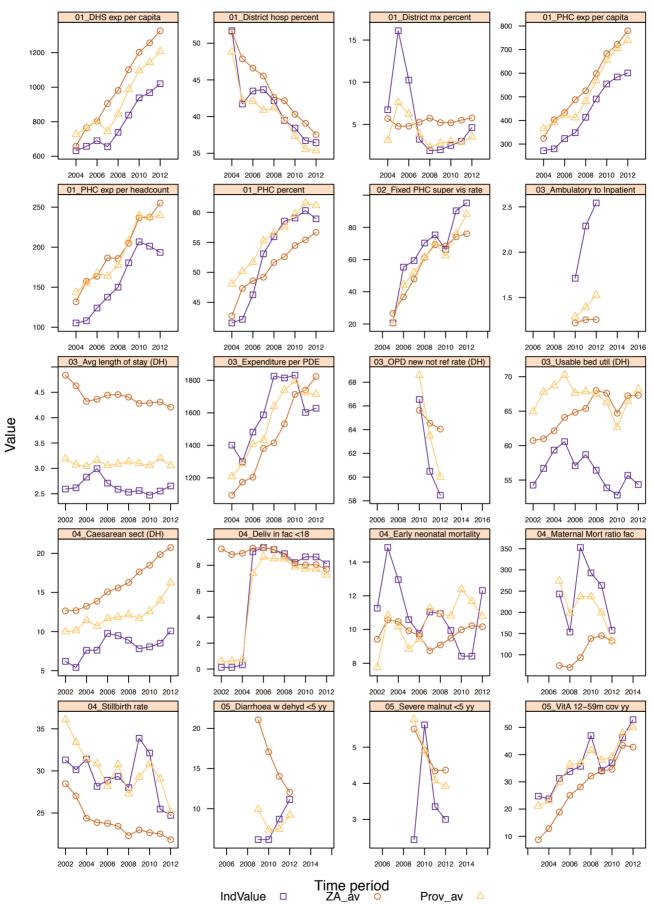
The TB incidence (all cases) at 469.0 per 100 000 people was the lowest in the province and well below the national incidence of 687.3 per 100 000 people. The TB case finding index of 1.9% was the second lowest provincially. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 297 in 2011 to 1 930 in 2012. The TB incidence (new pulmonary smear-positive) decreased from 276.0 per 100 000 people to 231.3; and was also the lowest incidence in the

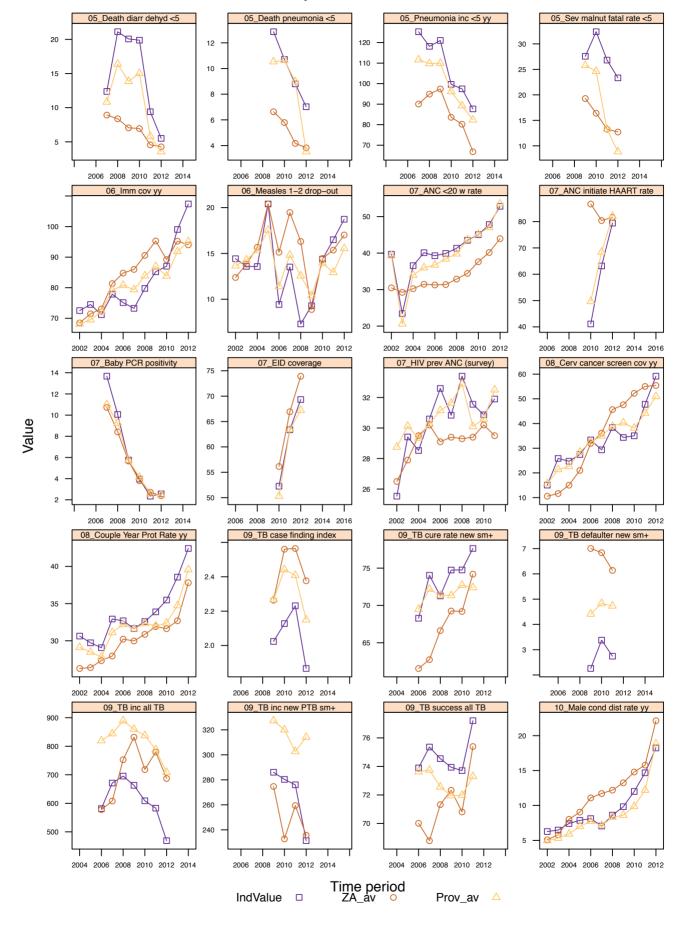
a Coverage rates of greater than 100% may be due to poor data quality or an underestimation of the under-1 population. The Census 2011 estimate for children under 1 for this district was, however, relatively similar to the current time series used in the DHIS, suggesting that the numerator may have quality problems, or that there is substantial cross-boundary use of services in Thabo Mofutsanyane District.

province. The TB (new pulmonary smear-positive) cure rate increased from 74.8% in 2010 to 77.6% in 2011. The new TB (new pulmonary smear-positive) defaulter rate at 2.7% was the lowest in the province, although it should be noted that 11.4% of this cohort died, representing the second highest death rate in the country. The TB successful treatment rate (all TB) at 77.2% was also the highest provincially and above the national rate of 75.4%.

Male condom distribution coverage was 18.2 condoms per year per male 15 years and older and in line with the provincial coverage of 18.9 condoms, but below the national coverage of 22.1 condoms. The total adults remaining on ART at the end of the month more than doubled, from 16 182 at the end of 2011/12 to 42 142 by the end of 2012/13. The total number of children under 15 years remaining on ART also more than doubled from 997 to 2 384 in the same period.

## Annual indicators for district: Thabo Mofutsanyane: DC19





## Annual indicators for district: Thabo Mofutsanyane: DC19

# Fezile Dabi District Municipality

# **Bruce Andinda**

Fezile Dabi District is located in the northern part of the Free State Province and, at 23.7%, has the second highest medical scheme coverage in the province.

The proportion of district health services expenditure on district hospitals was 34.7%, which reflects a slight decrease from 35.9% in 2011/12. The proportion of expenditure on district management reduced slightly from 2.6% in 2010/11 to 2.5% in 2012/13, which is still below the provincial and national averages of 3.9% and 3.4% respectively. The proportion of district health services expenditure on primary health care (PHC) was 62.8%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) recorded an increase of 25.8 percentage points to 72.1% in 2012/13 from 46.3% in 2011/12, but remained the lowest in the province, and below both the provincial and national averages of 88.2% and 76.0% respectively.

At 83.6%, the inpatient bed utilisation rate was well above both the provincial (68.2%) and national (67.3%) rates. The average length of stay in hospital is the second-highest in the province at 3.4 days, but this was still below the national average of 4.2 days. Unlike most districts in the country, though, this rate has been increasing steadily since 2004/05. Expenditure per patient day equivalent was R1 979, higher than both the national expenditure of R1 823 and the provincial expenditure of R1 714. The ratio of ambulatory to inpatient days was 1.3, lower than the provincial ratio of 1.5. A ratio of more than one means that more clients are seen at the emergency units/OPD clinics than are admitted into hospitals. The OPD new client not referred rate was 74.5%, which remains the highest in the province and above the national rate of 64.1%. This indicates that a high percentage of clients bypass the PHC facilities and access the district hospitals directly.

The delivery by Caesarean section rate was 20.4% and delivery in facility under 18 years rate 7.4%. The facility maternal mortality ratio appears to be quite variable, ranging from 256.7 in 2010/11 to 90.0 per 100 000 live births in 2011/12, and was 125.2 per 100 000 live births in 2012/13. The stillbirth in-facility rate reduced slightly from 28.5 per 1 000 births in 2011/12 to 26.3 per 1 000 births in 2012/13, but has remained substantially above the national average, in common with most Free State districts. Also of concern is that the inpatient early neonatal death rate was 13.5 per 1 000 live births, which is higher than both the provincial and national averages of 10.8 and 10.2 per 1 000 live births respectively, although there are signs of a recent decline.

The antenatal 1st visit before 20 weeks rate was 51.1%. According to the 2011 National Antenatal Sero-prevalence Survey, the HIV prevalence among antenatal clients tested was 35.6%. The antenatal client initiated on ART rate increased from 58.4% in 2011/12 to 65% in 2012/13. This was the lowest rate in the province and the fourth lowest in the country. According to the data from the National Health Laboratory Services (NHLS), the early infant HIV diagnosis coverage was 65.6%, and the proportion of PCR tests HIV positive for infants under two months of age was 3.1%. The baby PCR-positivity under two months of age was higher than both the provincial and national rates of 2.5% and 2.4% respectively. However, it was lower than the rate for infant 1st PCR test positive around 6 weeks (DHIS data) which was 3.6%.

Immunisation coverage under 1 year dropped by 3.7 percentage points from 88.2% in 2011/12 to 84.5% in 2012/13. This coverage was lower than the provincial and the national averages of 95.1% and 94% respectively. The measles vaccine 1st to 2nd dose drop-out rate was 12.0%.

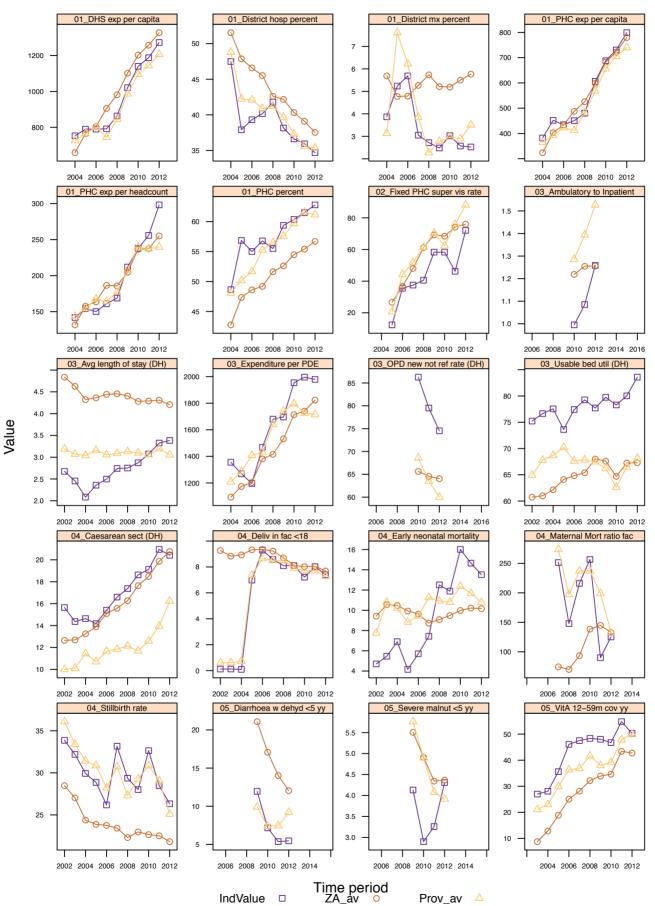
The child under 5 years diarrhoea with dehydration incidence was 5.5 episodes per 1 000 children and was below the provincial and national averages of 9.2 and 12.0 per 1 000 children under 5 years respectively. The child under 5 years diarrhoea case fatality rate decreased to 0.8% from 5.9% in 2011/12. This rate was well below both the provincial and the national averages of 3.6% and 4.3% respectively. The child under 5 years pneumonia incidence decreased from 75.6 cases per 1 000 children in 2011/12 to 66.4 cases per 1 000 children under 5 years in 2012/13. This was the second lowest rate in the province and in line with the national average of 66.8 per 1 000 children under 5 years. The child under 5 years pneumonia case fatality rate decreased from 4.9% in 2011/12 to 2.2% in 2012/13 and was below the national average of 3.8%. For child under 5 years severe acute malnutrition incidence, an increase from 3.3 cases per 1 000 children under 5 years in 2011/12 to 4.3 cases per 1 000 children under 5 years in 2012/13 was recorded. The child under 5 years pneumonia case fatality rate also increased slightly, from 4.2% in 2011/12 to 6.7% in 2012/13. Vitamin A coverage 12 to 59 months dropped from 54.8% in 2011/12 to 50.3% in 2012/13, but remained above the provincial and national averages of 49.9% and 42.8% respectively in 2012/13.

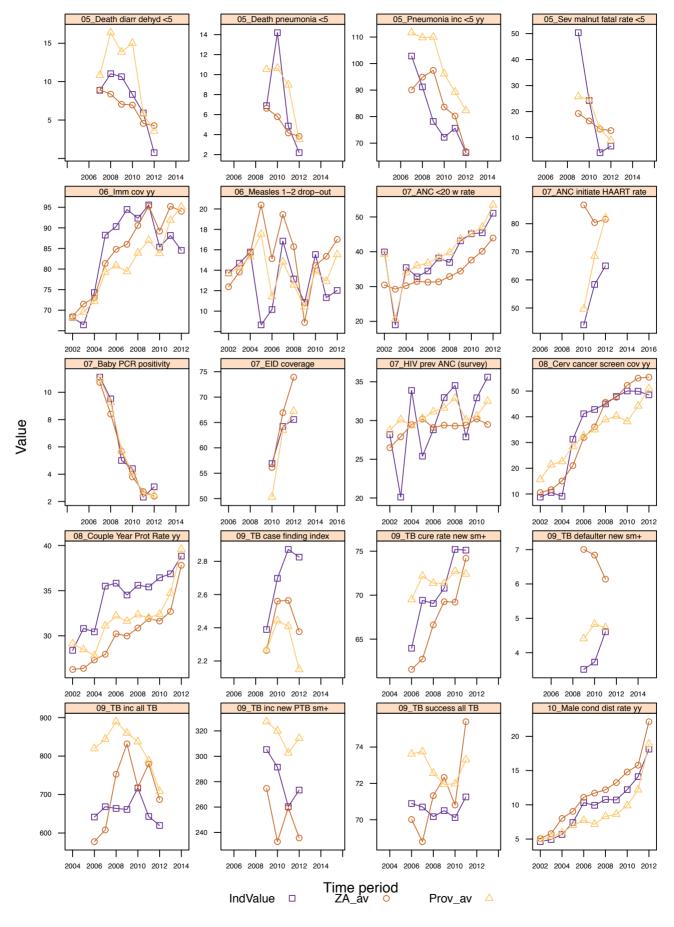
The cervical cancer screening coverage was 48.5% and the couple year protection rate was 38.8%.

TB incidence (all cases) was 619.7 per 100 000 people and below the national incidence of 687.3 per 100 000 people. The TB case finding index of 2.8% was the highest provincially. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 1 312 in 2011 to 1 388. The new pulmonary smear-positive TB incidence was 273.4 per 100 000. The new pulmonary smear-positive TB cure rate remained stable at 75.1%. The new pulmonary smear-positive TB defaulter rate was 4.6%; as with other districts in the Free State, this low rate is offset by the fact that for 10.5% of these cases, the outcome was death. The TB treatment success rate (all TB) was relatively low at 71.3%.

The male condom distribution coverage was 18.1 condoms per year per male 15 years and older. The total number of adults remaining on ART at end of the month increased significantly from 2 124 at the end of 2011/12 to 19 579, and the total for children under 15 years remaining on ART at end of the month increased from 207 to 1 313 in the same period.

### Annual indicators for district: Fezile Dabi: DC20





### Annual indicators for district: Fezile Dabi: DC20

# Mangaung Metropolitan Municipality

# Thenjiwe Jankie

The Mangaung Metropolitan District in the Free State Province has an estimated 27.1% of the population belonging to a medical scheme, the highest coverage in the province.

The proportion of total district expenditure on primary health care (PHC) was 56.4%, followed by 41.3% on district hospitals and 2.3% on district management.

The PHC facility supervisor visit rate (fixed clinic/CHC/CDC) was 90.6%, the highest since 2005/06, and also much higher than the national rate of 76.0%.

The inpatient bed utilisation rate was 82.5%, the highest since 2002/03 and above both the provincial (68.2%) and national (67.3%) averages. The average length of stay was 3.9 days, still longer than in all the other Free State districts, but showing a downward trend. Expenditure per patient day equivalent decreased from R1 618 in 2011/12 to R1 535 in 2012/13. The ratio of ambulatory to inpatient days ranged from 1.1 in 2010/11 to 1.2 in 2012/13. The OPD new client not referred rate at 60.7% was slightly lower than the national average of 64.1%, and indicates that a high percentage of clients bypass the PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate increased over four years from 20.1% in 2009/10 to 31.0% in 2012/13; this was well above the national rate of 20.8% and the fifth highest nationally. The delivery in facility under 18 years rate was 6.6%. The facility maternal mortality ratio was 103.3 per 100 000 live births and well below the national average of 132.9. This is the lowest reading for this rate since 2007/08. The stillbirth in facility rate increased over two consecutive years from 24.9 per 1 000 births in 2009/10 to 30.5 per 1 000 births in 2011/12, and dropped to 24.4 per 1 000 births in 2012/13. The inpatient early neonatal death rate also increased annually from 2009/10 when it was 8.5 per 1 000 live births to 10.8 per 1 000 live births in 2011/12, and then decreased to 7.5 per 1 000 live births in 2012/13.

The antenatal 1st visit before 20 weeks rate was 51.9% and increased from 43.1% in 2011/12. According to the 2011 National Antenatal Sero-prevalence Survey, the HIV prevalence among antenatal clients tested decreased from 31.7% in 2010 to 29.9%. The antenatal clients initiated on ART rate of 99.6% was notably higher than the 72.4% of 2011/12, and was much higher than the national average of 81.6%.

According to data from the National Health Laboratory Services (NHLS), the early infant HIV diagnosis coverage was 52.6%, a slight increase from 51.0% in 2011/12. The proportion of infants who were HIV-positive under two months (NHLS data) of 2.4% was higher than the infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.0%. Nonetheless, this clearly indicates a dramatic decline in HIV transmission.

The immunisation coverage under 1 year increased annually from 76.5% in 2010/11 to 99.9% in 2012/13. The measles 1st to 2nd dose drop-out rate increased from 13.0% in 2011/12 to 15.9% in 2012/13.

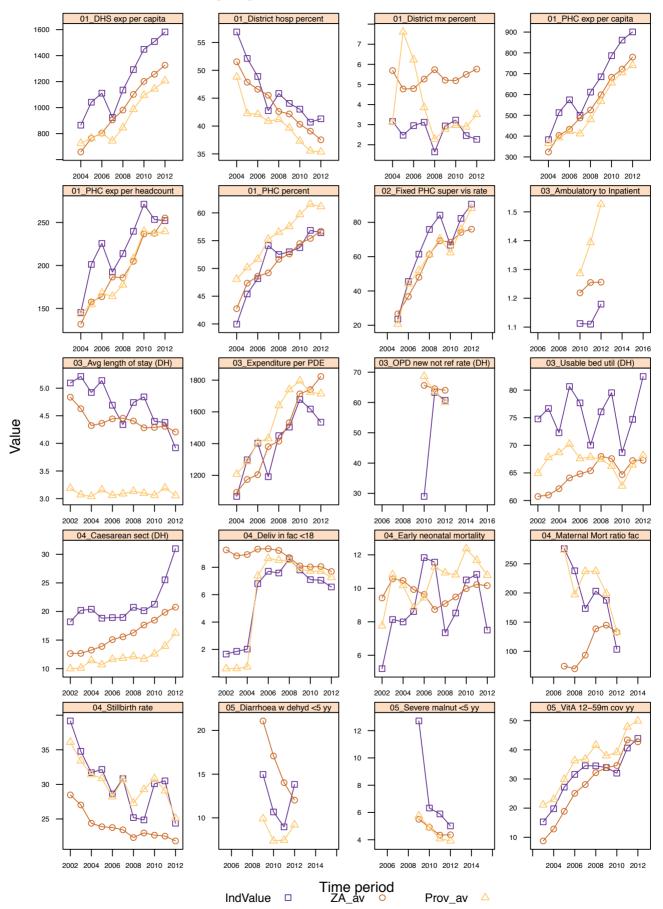
The child under 5 years diarrhoea with dehydration incidence decreased over three years from 15.0 episodes per 1 000 children in 2009/10 to 9.0 per 1 000 children in 2011/12 but increased in 2012/13 to 13.8 per 1 000 children. The child under 5 years diarrhoea case fatality rate was 2.2% and the lowest since 2008/09 when it was 18.2%; moreover, this is lower than the provincial average of 3.6% and the national average of 4.3%. The child under 5 years pneumonia incidence was 100.9 cases per 1 000 children and was higher than the provincial and national averages of 82.3 per 1 000 children and 66.8 per 1 000 children respectively. The child under 5 years pneumonia case fatality rate, at 2.2%, was the lowest since 2009/10, and was lower than both the provincial rate of 3.5% and the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence was 5.0 cases per 1 000 children, being the lowest since 2004/05. This incidence was, however, higher than the provincial incidence of 3.9 per 1 000 children and the national incidence of 4.4 per 1 000 children. The child under 5 years severe acute malnutrition case fatality rate was 4.6%, lower than the provincial rate of 8.8% and the national rate of 12.7%.

The cervical cancer screening coverage was 45.5% and nearly 10 percentage points lower than the national average of 55.4%. The couple year protection rate increased from 28.0% in 2011/12 to 33.7%. This was, however, lower than both the provincial (39.6%) and national (37.8%) rates.

The TB incidence (all cases) was 893.6 per 100 000 people and above the national incidence of 687.3 per 100 000 people. The TB case finding index of 1.6% was the lowest provincially. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 1 879 in 2011 to 2 222, and the TB incidence (new pulmonary smear-positive) increased from 259 per 100 000 people to 304.4. The TB (new pulmonary smear-positive) cure rate decreased from 68.3% in 2010 to 66.3%, to be the lowest in the province in 2011. The TB (new pulmonary smear-positive) defaulter rate, at 7.5%, was the highest in the province, and the treatment success rate (all TB) was 69.5% and below the national rate of 75.4%.

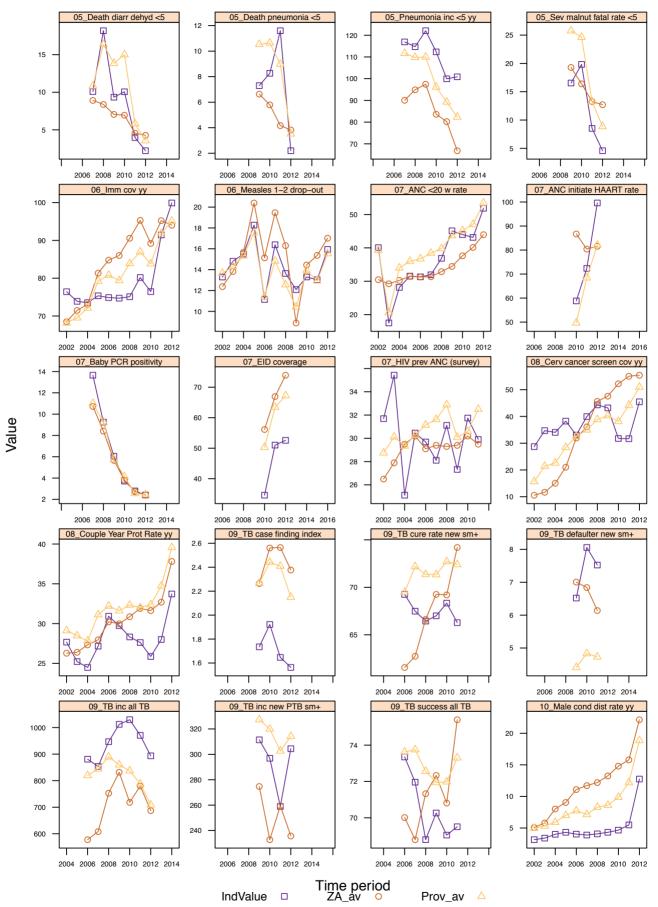
The male condom distribution coverage increased from 5.5 condoms per male 15 years and older in 2011/12 to 12.8 condoms, but was still below the provincial rate of 18.9 and the national rate of 22.1 condoms. The total number of adults remaining on ART at end of the month was 25 716 by the end of 2012/13. The total number of children under 15 years

remaining on ART at end of the month was 1 536 by the end of 2012/13. The Mangaung Metropolitan District only has data for 2012/13.



Annual indicators for district: Mangaung: MAN

## Annual indicators for district: Mangaung: MAN



Natasha Chetty

# 14 Gauteng Province

# **Sedibeng District Municipality**

Sedibeng District is situated in Gauteng Province and has the lowest medical scheme coverage in the province, at 19.4%.

The proportion of Sedibeng's district health services expenditure on primary health care (PHC) was 66.7%, while 3.9% was spent on district management. The proportion of district expenditure on district hospitals in 2012/13 was 29.4%, higher than the provincial percentage of 20.7% but below the national percentage of 37.5%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) remained unchanged since 2011/12 at 94.4%, still well above the national average of 76.0%.

The inpatient bed utilisation rate was 67.9% with an average length of stay of 3.3 days, similar to the provincial average of 3.2 days but lower than the national average of 4.2 days. The expenditure per patient day equivalent increased significantly from R1 986 in 2011/12 to R2 321 in 2012/13, this being well above the provincial and national averages of R2 172 and R1 823 respectively. The ratio of ambulatory to inpatient days was 1.0, lower than the provincial and national ratio of 1.3. This means that there is an even split between the number of clients seen at the emergency unit/OPD clinics and those admitted to hospital. The OPD new client not referred rate of 38.6% was lower than both the provincial and national rates of 53.2% and 64.1% respectively. This indicates that a relatively lower percentage of clients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate of 24.3% was higher than both the provincial and national averages of 21.2% and 20.8% respectively. The rate for delivery in facility under 18 years remained steady at 6.3%, higher than the provincial percentage of 4.8%. The stillbirth in facility rate decreased from 25.7 per 1 000 births in 2011/12 to 20.2 per 1 000 births in 2012/13, similar to the provincial average of 19.9 per 1 000 births and lower than the national average of 21.8 per 1 000 births. The inpatient early neonatal death rate was 9.5 per 1 000 live births, but appears to be increasing when considering long-term trends. Sedibeng District has the second highest facility maternal mortality ratio in the province at 195.0 per 100 000 live births, an increase from 160.3 per 100 000 live births in 2011/12 and higher than the national rate of 132.9 per 100 000 live births.

The antenatal 1st visit before 20 weeks rate increased steadily from 27.3% in 2009/10 to 44.6% in 2012/13, higher than the provincial rate of 37.8% and similar to the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows that HIV prevalence among antenatal clients tested was 31.7% in 2011. The antenatal client initiated on ART rate increased significantly from 54.8% in 2010/11 to 92.6% in 2012/13.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was the lowest in the province at 56.0%, therefore considerably lower than the provincial average of 86.7%, as well as much lower than the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.3% was on par with the 2.3% value of the PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year decreased from 120.8% in 2011/12 to 117.7% 2012/13 – although immunisation rates above 100% suggest poor data quality or incorrect catchment population figures. The measles 1st to 2nd dose dropout rate decreased slightly from 22.7% to 20.0%, almost on par with the provincial average of 19.8%, but higher that the national average of 17.0%.

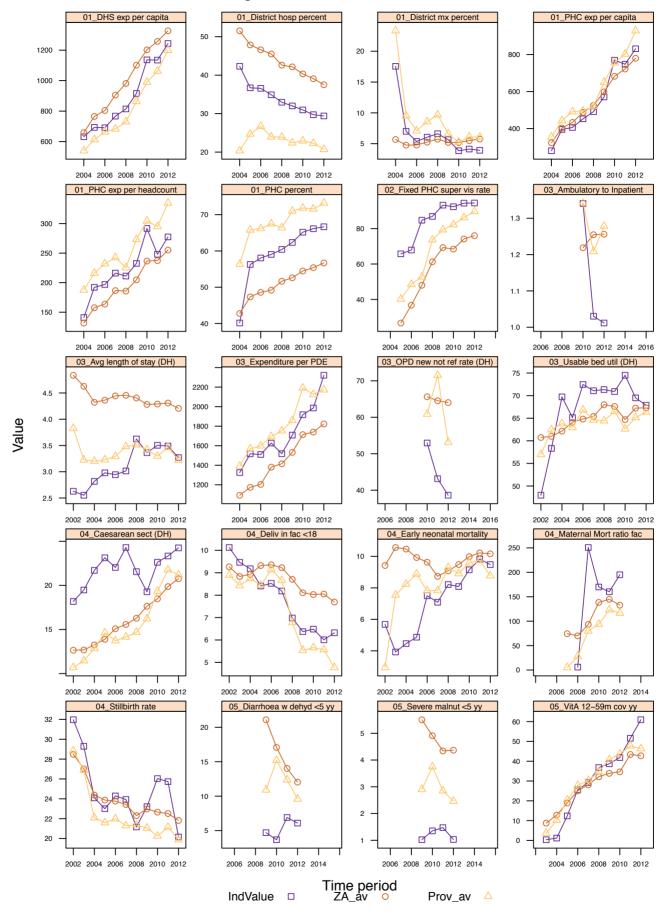
The child under 5 years diarrhoea with dehydration incidence decreased from 6.9 episodes per 1 000 children in 2011/12 to 6.1 episodes per 1 000 children in 2012/13, the fifth lowest in the country and hence significantly lower than the national average of 12.0 per 1 000 children. Despite the significantly lower national child under 5 years diarrhoea with dehydration incidence, the child under 5 years diarrhoea case fatality rate is among the highest at 7.4% compared to the provincial and national averages of 3.3% and 4.3% respectively. The child under 5 years pneumonia incidence has also steadily decreased from 54.8 cases per 1 000 children in 2007/08 to 27.1 per 1 000 children in 2012/13, the fourth lowest nationally, with the national average at 66.8. The child under 5 years pneumonia case fatality rate average is among the highest in the country at 7.3%, which is notably greater than the provincial average of 2.3% and the national average of 3.8%. The child under 5 years severe acute malnutrition incidence of 1.0 per 1 000 children was the lowest in the province and second lowest in the country. The child under 5 years severe acute malnutrition case fatality rate is also among the highest in the country at 19.2%, substantially higher than the provincial and national averages of 12.1% and 12.7% respectively. Vitamin A coverage of children 12 to 59 months increased considerably from 51.6% in 2011/12 to 60.9% in 2012/13, and this is also much higher than the provincial and 42.8% respectively.

There has been a steady increase in the couple year protection rate from 24.0% in 2006/07 to 40.3% in 2012/13, the highest in the province and slightly higher than the national average of 37.8%. Sedibeng District had the lowest cervical cancer screening coverage in the province at 33.8%, far lower than the national average of 55.4%.

#### **Section B: Profile Gauteng Province**

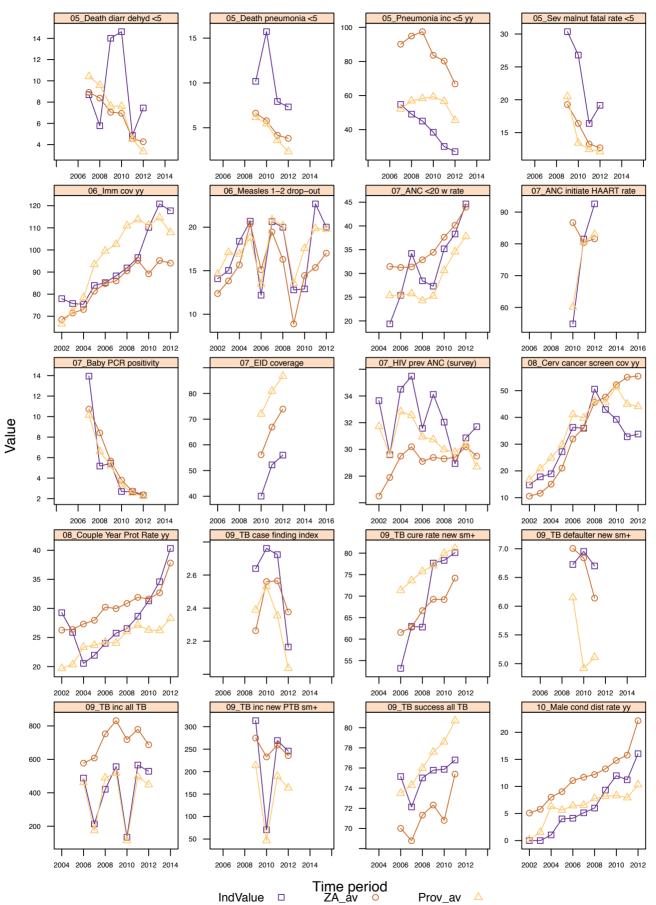
The TB incidence (all cases) was the second highest in the province at 528.8 per 100 000 people, higher than the provincial rate of 448.3 per 100 000 people but lower than the national rate of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 359 in 2011 to 2 171. TB incidence (new pulmonary smear-positive) was the second highest provincially at 245.8 per 100 000 people. The TB case finding index was 2.2%, in line with both provincial and national percentages, which were 2.0 and 2.4 respectively. The TB cure rate (new pulmonary smear-positive) was 80.1% in 2011, higher than the national average of 74.2%. The TB defaulter rate (new pulmonary smear-positive) was the second highest in the province in 2011 at 6.7%, and the TB treatment success rate (all TB) was 76.8%, the second lowest provincially.

Male condom distribution coverage at 16.0 condoms per male 15 years and older was between the provincial and national averages of 10.3 and 22.1 respectively. Adults remaining on ART at the end of 2010/11 increased from 8 573 to 43 917 by the end of 2012/13. The child under 15 years remaining on ART at end of the month total also increased from 155 to 2 873 in the same period.



## Annual indicators for district: Sedibeng: DC42

## Annual indicators for district: Sedibeng: DC42



## West Rand District Municipality

## Joan Dippenaar and Sne Khuzwayo

The West Rand District is in the south west of Gauteng Province and has an estimated medical scheme coverage of 24.4%.

The proportion of district health services expenditure on district management almost halved over the last four years and was 9.6%, but was higher than the provincial average of 6.1% and the national average of 3.4%. The proportion of district expenditure on district hospitals dropped by 8.8 percentage points from 2009/10 to 28.8%. The proportion of health services expenditure on primary health care (PHC) was 61.6%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) increased from 80.9% in 2011/12 to 98.9% and was the third highest in the country.

The inpatient bed utilisation rate was 66.7% with an average length of stay of 3.8 days, above the provincial average of 3.2 days but shorter than the national average of 4.2 days. The expenditure per patient day equivalent was R2 233, and this was above the provincial and national averages of R2 172 and R1 823 respectively. The ratio of ambulatory to inpatient days was 0.8, lower than the provincial and national ratio of 1.3. A ratio less than one means that more clients are admitted to hospital than are seen at the emergency unit/OPD clinics. The OPD new client not referred rate of 63.1% was the highest provincially and indicates that many patients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate of 21.4% was in line with both the provincial and national averages of 21.2% and 20.8% respectively. The delivery in facility under 18 years remained stable at 5.8%, higher than the provincial percentage of 4.8% but lower than the national percentage of 7.7%. The stillbirth in facility rate decreased from 17.5 per 1 000 births in 2011/12 to 14.2 per 1 000 births in 2012/13, lower than both the provincial average of 19.9 per 1 000 births and the national average of 21.8 per 1 000 births. At 5.1 per 1 000 live births, the inpatient early neonatal death rate was the lowest in the province and much lower than the national rate of 10.2 per 1 000 live births. The facility maternal mortality ratio was also the lowest provincially at 60.1 per 100 000 live births, a decrease from 95.5 per 100 000 live births in 2011/12.

The antenatal 1st visit before 20 weeks rate increased from 40.4% in 2011/12 to 47.3% in 2012/13, which is higher than the provincial rate of 37.8% and in line with the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows that HIV prevalence among antenatal clients tested was 32.3%. The antenatal client initiated on ART rate increased significantly from 56.7% in 2010/11 to 81.5% in 2012/13, and is in line with both the provincial and national rates of 83.0% and 81.6% respectively.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was the second lowest in the province at 74.3%, and was lower than the provincial average of 86.7% but in line with the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.8% was the highest rate provincially. This value was slightly higher than the 2.6% of the PCR test positive around 6 weeks rate (DHIS data), but both have achieved the target.

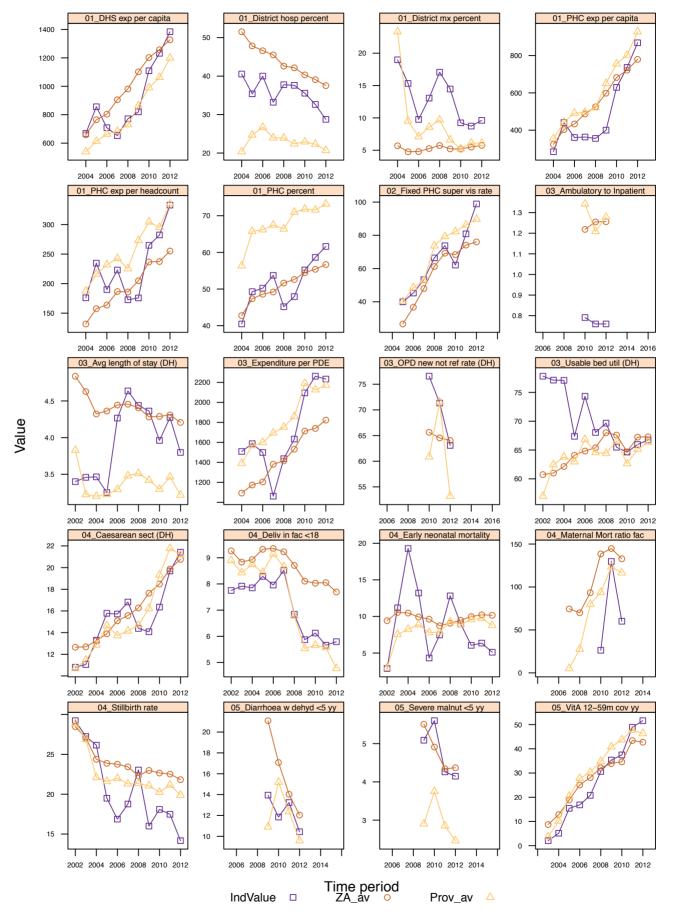
The immunisation coverage under 1 year was 104.4%. Immunisation rates above 100% suggest dubious data quality or incorrect catchment population figures. The measles 1st to 2nd dose drop-out rate increased slightly from 12.8% to 14.1%, but this was lower than the provincial average of 19.8% and the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was the second highest in the province at 10.4 episodes per 1 000 children; the child under 5 years diarrhoea case fatality rate at 0.4% was the seventh lowest in the country. The child under 5 years pneumonia incidence decreased from 43.7 cases per 1 000 children in 2011/12 to 35.7 per 1 000 children in 2012/13, and was well below the national average of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate was the second lowest nationally at 0.7%. The child under 5 years severe acute malnutrition incidence was 4.1 cases per 1 000 children and was the highest in the province, whereas the child under 5 years severe acute malnutrition case fatality rate was the lowest nationally at 1.2%. Vitamin A coverage of children 12 to 59 months was 51.6% and higher than the provincial and national percentages of 46.3% and 42.8% respectively.

There has been a steady increase in the couple year protection rate from 15.6% in 2006/07 to 31.4% in 2012/13; however, this was below the national average of 37.8%. The cervical cancer screening coverage decreased from 43.4% in 2011/12 to 37.3% and was significantly lower than the national average of 55.4%.

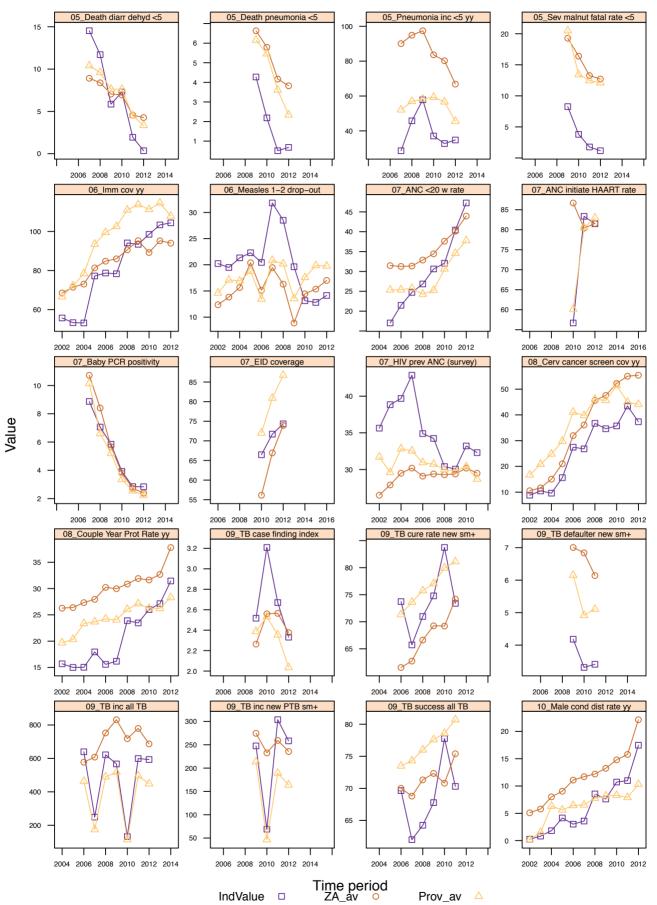
The TB incidence (all cases) in the West Rand District was the highest in the province at 593.4 per 100 000 people, but lower than the national rate of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 800 in 2011 to 2 431 in 2012. The TB incidence (new pulmonary smear-positive) was the highest provincially at 258.4 per 100 000 people and above the national incidence of 235.7 per 100 000 people. The TB case finding index was 2.3%. The TB (new pulmonary smear-positive) cure rate at 73.4% in 2011 was the lowest provincially. The TB (new pulmonary smear-positive) defaulter rate was the second lowest in the province at 3.4%. Ten percent of new pulmonary smear-positive treatment outcomes were lost to follow-up – not evaluated – in 2011, so these cure and defaulter rates may not be an accurate reflection of TB management. The TB treatment success rate (all TB) was 70.3% in 2011, also the lowest provincially.

Male condom distribution coverage at 17.5 condoms per male 15 years and older was the highest provincially but lower than the national averages of 22.1. The total number of adults remaining on ART at the end of the month increased from 7 827 at the end of 2010/11 to 33 393 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 214 to 2 084 in the same period.



#### Annual indicators for district: West Rand: DC48

## Annual indicators for district: West Rand: DC48



# **Ekurhuleni Metropolitan Municipality**

# Natasha Chetty

Ekurhuleni Metropolitan District in Gauteng Province has an estimated medical scheme coverage of 25.5%.

The proportion of district health services expenditure on primary health care (PHC) was 83.1%, the second highest in both the province and nationally. The proportion of district health services expenditure on district management was 6.8%, a 2.6 percentage point decrease since 2011/12, but still higher than the provincial and national averages of 6.1% and 5.8% respectively. Since 2006/07, there was a steady decrease in the proportion of district health services expenditure on district hospitals, from 14.0% to 10.1% in 2012/13, the second lowest in the province and nationally and significantly lower than both the provincial and national averages of 20.7% and 37.5% respectively. Ekurhuleni Metropolitan District has only one district hospital.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was the second highest in the province at 96.4% and well above the national average and target of 76% and 80% respectively.

The inpatient bed utilisation rate was 87.1%, an increase from 80.4% in 2011/12 and considerably higher than the provincial and national averages of 66.3% and 67.3% respectively. The average length of stay was 3.0 days, which was shorter than the national average of 4.2 days. The expenditure per patient day equivalent increased from R2 022 in 2011/12 to R2 174 in 2012/13, similar to the provincial average and higher than the national average of R1 823. The ratio of ambulatory to inpatient days was 1.9, which was much higher than the provincial and national ratios of 1.3. This indicates that many more patients are seen at the emergency and OPD units than are being admitted as inpatients. The OPD new client not referred rate of 62.2% was significantly lower than the 2011/12 rate of 84.7%; however, it was higher than the provincial average of 53.2%. A relatively high percentage of patients, therefore, bypass PHC facilities and access the district hospital directly.

The delivery by Caesarean section rate in district hospitals decreased steadily from 21.4% in 2009/10 to 16.4% in 2012/13, the lowest in the province and lower than the national average of 20.8%. The delivery in facility under 18 years rate also decreased from 9.2% in 2007/08 to 4.9% in 2012/13, the third lowest both provincially and nationally. Ekurhuleni Metropolitan District had the highest stillbirth in facility rate, inpatient early neonatal death rate, and facility maternal mortality ratio (MMR) in the province. The stillbirth in facility rate was at 21.4 per 1 000 births, and the inpatient early neonatal death rate was 10.1 per 1 000 live births. The facility MMR was 218.7 per 100 000 live births, an increase from 202.0 per 100 000 live births in 2011/12, and higher than the national rate of 132.9 per 100 000 live births.

Although the antenatal 1st visit before 20 weeks rate increased steadily from 17.2% in 2007/08 to 36.3% in 2012/13, it was the second lowest in the province and the fourth lowest nationally. The 2011 National Antenatal Sero-prevalence Survey shows an HIV prevalence among antenatal clients tested of 30.1%. The antenatal client initiated on ART rate increased from 82.7% in 2011/12 to 87.3% in 2012/13, and was higher than both the provincial and national rates of 83.0% and 81.6% respectively.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage in Ekurhuleni increased significantly from 60.9% in 2010/11 to 84.2% in 2012/13, similar to the provincial average of 86.7%, and notably higher than the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.3% was in line with the 2.2% value of the PCR test positive around 6 weeks rate (DHIS data).

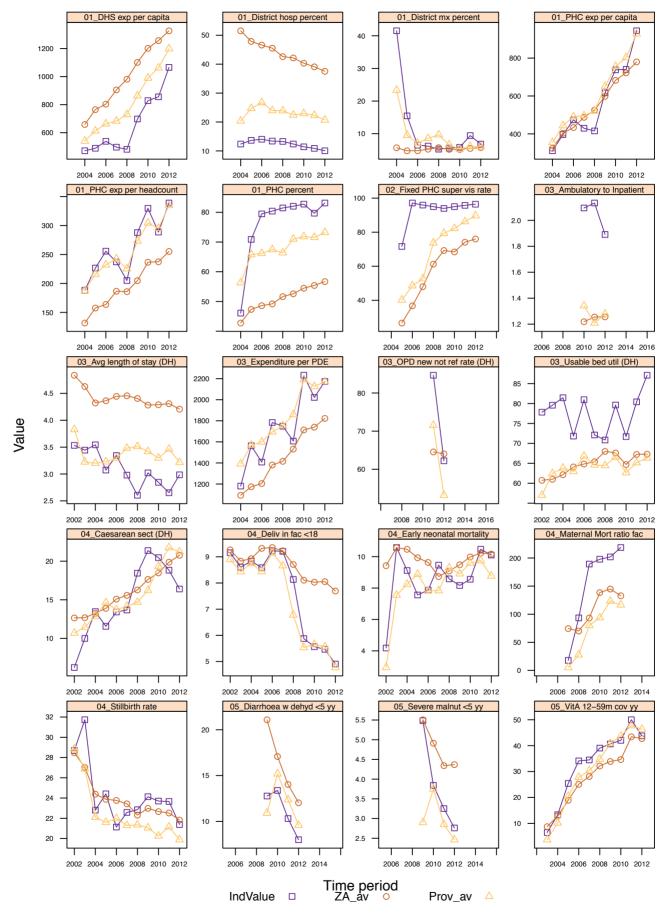
The immunisation coverage under 1 year was 106.6% in 2012/13. Immunisation rates above 100% suggest dubious data quality or incorrect catchment population figures. The measles 1st to 2nd dose drop-out rate increased steadily from 13.8% in 2009/10 to 20.1% in 2012/13, the second highest in the province and higher than the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence decreased slightly from 10.3 episodes per 1 000 children in 2012/13, the second lowest in the province and hence lower than the provincial average of 9.6 episodes per 1 000 children, as well as notably lower than the national average of 12.0 per 1 000 children. Ekurhuleni's child under 5 years diarrhoea case fatality rate decreased slightly from 4.4% in 2011/12 to 3.3% in 2012/13, on par with the provincial average and slightly lower than the national average of 4.3%. The child under 5 years pneumonia incidence decreased steadily from 68.9 cases per 1 000 children in 2008/09 to 35.7 cases per 1 000 children in 2012/13, lower than both the provincial and national rates of 45.5 and 66.8 per 1 000 children respectively. The child under 5 years speares pneumonia case fatality rate decreased steadily from 7.3% in 2009/10 to 2.7% in 2012/13, similar to the provincial average of 3.8%. There was also a steady decrease in child under 5 years severe acute malnutrition incidence from 5.5 cases per 1 000 children in 2009, to 2.8 cases per 1 000 children in 2012/13, slightly higher than the provincial average of 2.5 cases per 1 000 children, but nevertheless lower than the national average of 4.4 cases per 1 000 children. There was a notable decrease in the child under 5 years severe acute malnutrition case fatality rate 1.2% in 2012/13, which is similar to both the provincial and national average of 12.0% in 2012/12 to 43.8% in 2012/13 and is lower than the provincial average of 4.6.3%.

The couple year protection rate was the second lowest in the province at 27.2%, and also notably lower than the national average of 37.8%. Although Ekurhuleni had the second highest percentage of cervical cancer screening coverage in the province at 47.2%, this was lower than the national average of 55.4%.

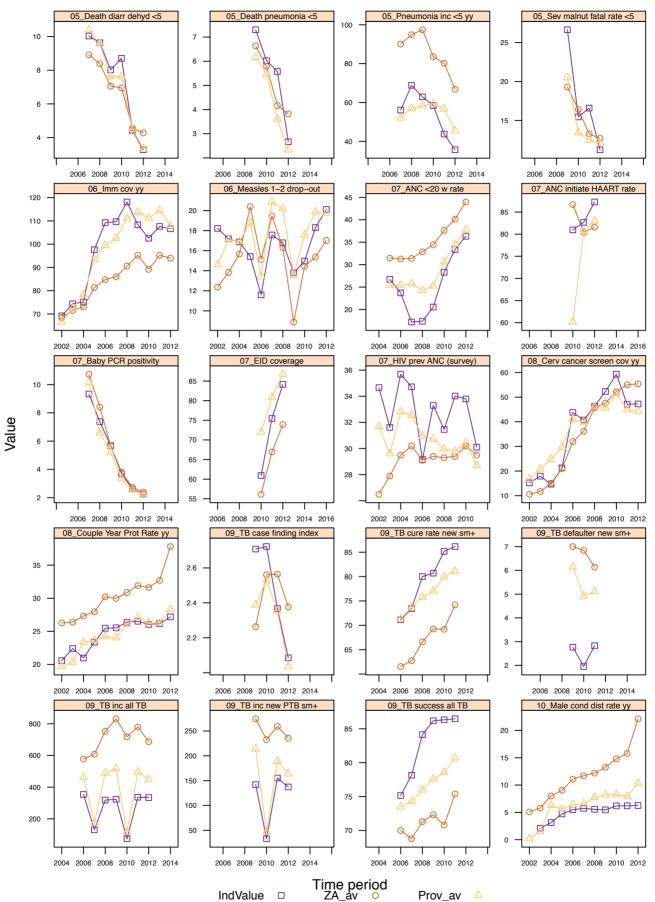
The TB incidence (all cases) was the lowest in the province and third lowest in the country at 334.5 per 100 000 people, therefore significantly lower than the provincial rate of 448.3 per 100 000 people and the national rate of 687.3 per 100 000 population. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 5 434 in 2011 to 4 064. TB incidence (new pulmonary smear-positive) was the second lowest provincially at 137.3 per 100 000 people, and well below the national incidence of 235.7 per 100 000 people. The TB case finding index was 2.1%, similar to both provincial and national percentages, 2.0% and 2.4% respectively. The TB cure rate (new pulmonary smear-positive) was 86.2% in 2011, the highest in the province and higher than the national average of 74.2%. The TB defaulter rate (new pulmonary smear-positive) was the lowest in the province in 2011/12 at 2.8%. The TB treatment success rate (all TB) was 86.5% in 2011/12, the highest both provincially and nationally.

Ekurhuleni had the lowest male condom distribution coverage of 6.3 condoms per male 15 years and older in the province and significantly lower than the national average of 22.1. The total number of adults remaining on ART at the end of 2010/11 increased from 30 021 to 133 864 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month total also increased from 176 to 7 617 in the same period.



### Annual indicators for district: Ekurhuleni: EKU

## Annual indicators for district: Ekurhuleni: EKU



# **City of Johannesburg Metropolitan Municipality**

# Rakshika Bhana

Johannesburg Metropolitan District in Gauteng Province has an estimated medical scheme coverage of 24.8%.

The percentage of district health services expenditure on district management and primary health care (PHC) remained unchanged from the previous year at 3.2% and 90.6% respectively in 2012/13. Similarly, the percentage of expenditure on district hospital services remained almost the same at 6.3% in 2012/13.

Despite the increase in the PHC supervisor visit rate (fixed clinic/CHC/CDC) in 2012/13 by 3.2 percentage points to 78.7%, this remains the lowest in the province, albeit higher than the national average of 76%.

The district has only one district hospital. There has been a decrease in the inpatient bed utilisation rate since 2009/10 with a bed utilisation rate of 53.0% in 2012/13. The average length of stay decreased only marginally to 3.6 days from 3.8 days in 2011/12 but is still longer than the provincial average. The expenditure per patient day equivalent was R2 198, which was higher than the provincial and national averages at R2 172 and R1 823 respectively. The ratio of ambulatory to inpatient days decreased from 1.5 in 2011/12 to 1.2 in 2012/13, which was lower than the provincial ratio of 1.3. This means that slightly more clients are seen at the emergency unit/OPD clinics than are admitted to hospital. No data were available for the metro for the OPD new client not referred rate for district hospitals.

The delivery by Caesarean section rate in district hospitals in the metro dropped only slightly from 34.1% in 2011/12 to 32.6% in 2012/13, but remained the highest in the province and above the national average of 20.8%. The delivery in facility under 18 years rate was 4.0% and the lowest in the country. The maternal mortality ratio recorded by the DHIS dropped by 6.2 percentage points in 2012/13 to 61.8 per 100 000 live births, the second lowest in the province. The stillbirth in facility rate increased from 18.5 per 1 000 births in 2011/12 to 19.0 per 1 000 births. The inpatient early neonatal death rate remained stable in 2012/13 at 10.0 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased steadily since 2009/10 from 21.5% to 34.3% in 2012/13; however, this rate remains the lowest in the province with a provincial average of 37.8%. The 2011 National Antenatal Sero-prevalence Survey measured the HIV prevalence among antenatal clients as 28.9%. The antenatal clients initiated on ART rate decreased from 77.7% in 2011/12 to 73.3% in 2012/13, which was lower than the provincial average of 83.0%.

The early infant HIV diagnosis coverage, using data from the National Health Laboratory Services (NHLS), was 98.7% in 2012/13 and is above the provincial and national coverages of 86.7% and 73.9% respectively. The infant 1st PCR test positive at 6 weeks rate (DHIS data) dropped from 3.1% in 2011/12 to 2.2% in 2012/13, the lowest in the province. This was consistent with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.2% in 2012/13.

The immunisation coverage under 1 year was 118.0% in 2012/13, and 125.0% in 2011/12. While this ranks the Johannesburg Metropolitan District as having the highest immunisation coverage in the country, rates above 100% suggest poor data quality or incorrect catchment population figures. The measles 1st to 2nd dose drop-out rate increased from 17.4% in 2011/12 to 18.6% in 2012/13.

The child under 5 years diarrhoea with dehydration incidence was 12.5 episodes per 1 000 children, almost the same as the national incidence of 12.0 episodes per 1 000 children, and the child under 5 years diarrhoea case fatality rate decreased by 3.8 percentage points to 1.9% in 2012/13, which was lower than the provincial rate of 3.3%. The child under 5 years pneumonia incidence dropped from 64.1 cases per 1 000 children under 5 years to 50.5 cases per 1 000 children, and the under 5 years pneumonia case fatality rate also dropped from 3.3% in 2011/12 to 1.3% in 2012/13. This was lower than the provincial average of 2.3% and the second lowest in the province. The child under 5 years severe acute malnutrition incidence dropped from 3.1 cases per 1 000 children in 2011/12 to 2.8 cases per 1 000 children in 2012/13, and the child under 5 years acute malnutrition case fatality rate dropped in the same period from 18.8% to 13.7%. This, however, was higher than the provincial average of 12.1%. The vitamin A coverage 12 to 59 months decreased annually from 61.0% in 2010/11 to 55.1% in 2012/13, but still places the metro as the fifth best-performing district on this indicator nationally.

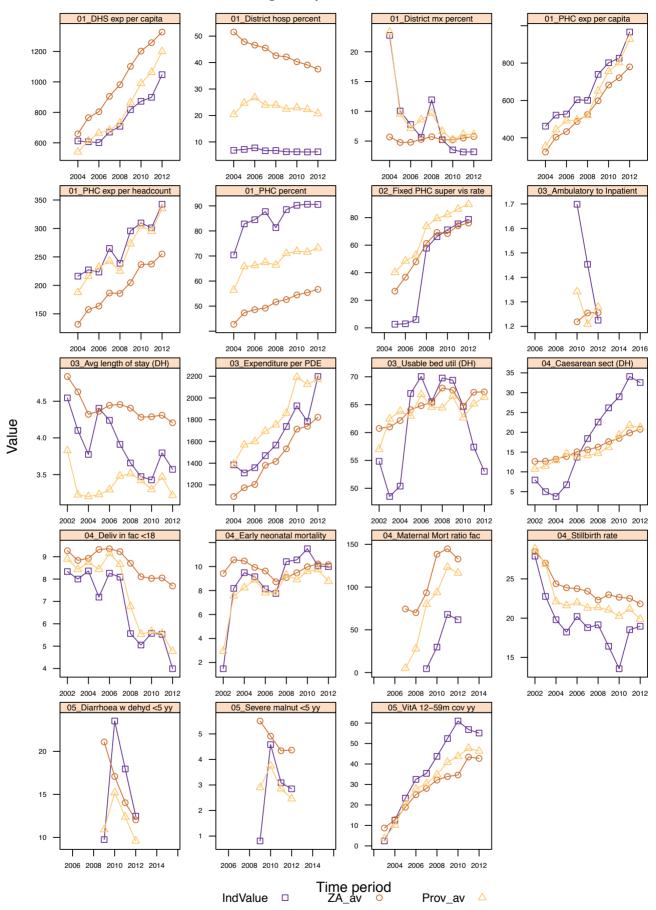
The cervical screening coverage of 49.8% in 2012/13 was the highest in the province, but lower than the national average coverage of 55.4%. The couple year protection rate increased by 1.8 percentage points in 2012/13 to 28.0%, similar to the provincial average of 28.3%, but lower than the national average of 37.8%.

The TB incidence (all cases) was 499.6 per 100 000 people in 2012, higher than the provincial average of 448.3 per 100 000 cases. The TB case finding index was 1.7%. The number of cases diagnosed with new pulmonary smear-positive TB decreased from 7 800 in 2011 to 7 137 in 2012. The TB incidence (new pulmonary smear-positive) was 187.2 per 100 000 people, which was higher than the provincial average of 163.8 per 100 000 people. The TB cure rate (new pulmonary smear-positive) smear-positive) decreased from 83.4% in 2010 to 81.4% in 2011, and the TB defaulter rate (new pulmonary smear-positive) increased from 5.6% to 6.3% in the same period. The TB treatment success rate (all cases) was 81.9% in 2011, higher than the national average of 75.4%.

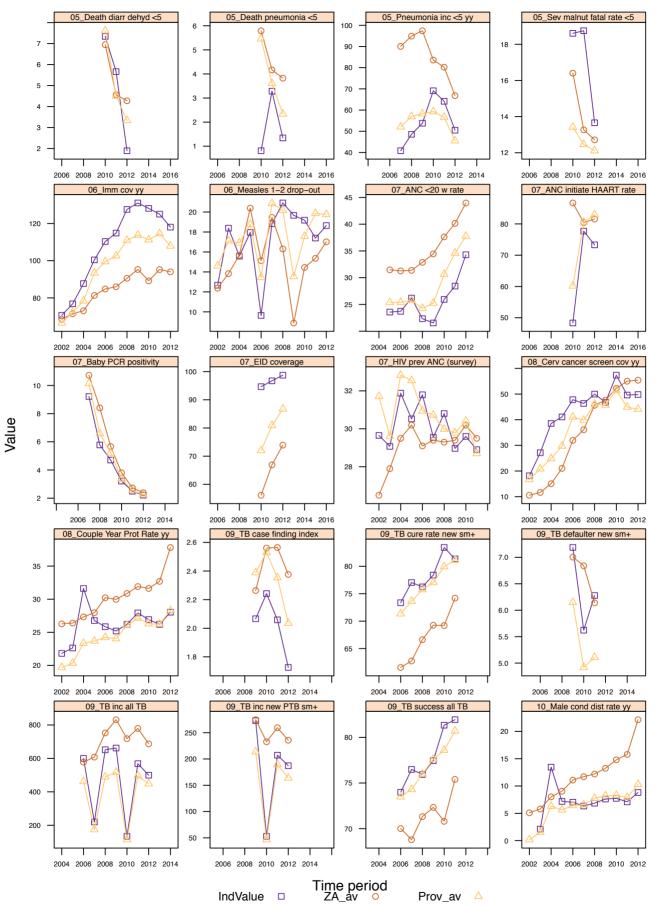
## **Section B: Profile Gauteng Province**

The male condom distribution coverage for 2012/13 was the second lowest in the province at 8.8 condoms per male 15 years and older, and well below the national average of 22.1 condoms per male. The total number of adults and children under 15 years remaining on ART at end of the month increased from the end of 2011/12 to 2012/13 as follows: adults from 70 148 to 177 176, and children from 657 to 10 065.

## Annual indicators for district: Johannesburg Metropolitan: JHB



## Annual indicators for district: Johannesburg Metropolitan: JHB



# **City of Tshwane Metropolitan Municipality**

# Rakshika Bhana

The Tshwane Metropolitan Municipality in Gauteng Province has an estimated medical scheme coverage of 33.2%, which is the highest recorded coverage in the country. The district is also one of the 11 National Health Insurance (NHI) pilot districts.

The proportion of district health services expenditure on district management and the proportion of total district expenditure on primary health care (PHC) increased in 2012/13 to 7.8% and 57.0% from 6.8% and 56.7% respectively. The percentage expenditure on district hospital services at 35.2% was the lowest expenditure recorded since 2005/06, but the highest in the province in 2012/13.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) has been above 90% for the past three years, and at 91.3% was higher than the national average of 76.0%.

The inpatient bed utilisation rate increased from 63.3% in 2011/12 to 66.2%, slightly below the national rate of 67.3%. The average length of stay at district hospitals decreased to 3.0 days in 2012/13 from 3.3 days in 2011/12. The expenditure per patient day equivalent decreased only slightly to R 2 111 from R 2 211 in 2011/12, and is not much different from the provincial average of R 2 172. The ratio of ambulatory to inpatient day increased from 1.2 in 2011/12 to 1.5 in 2012/13, which was higher than the provincial and national ratios of 1.3. A ratio of more than one means that more clients are seen at the emergency unit/OPD clinics than are admitted to hospital. Data for the metro on the OPD new client referred rate for district hospitals showed a decrease to 47.3% in 2012/13 from 68.2% in 2011/12. This indicates that just under 50% of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate at district hospitals in 2012/13 was 19.7%, slightly below the national rate of 20.8%. The delivery in facility under 18 years rate dropped by 0.7 percentage points to 4.9% in 2012/13, and was the second lowest in the country. The facility maternal mortality ratio was 62.0 per 100 000 live births in 2012/13, a decrease from 95.5 per 100 000 live births in 2011/12 and lower than the provincial ratio of 116.5 per 100 000 live births. The stillbirth rate of 21.1 per 1 000 births was slightly higher than the provincial rate of 19.9 per 1 000 births. The inpatient early neonatal death rate dropped from 9.6 per 1 000 live births in 2011/12 to 6.5 per 1 000 live births in 2012/13, which was the second lowest in the province and below the provincial rate of 8.8 per 1 000 live births.

At 40.6%, the antenatal client 1st visit before 20 weeks rate was higher than the provincial average of 37.8%, but lower than the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed a drop in the HIV prevalence among antenatal clients tested (24.4%) from 26.5% in 2010. The antenatal clients initiated on ART rate (95.7%) was the highest in the province and among the NHI districts, and above the national rate of 81.6%.

Data accessed from the National Health Laboratory Services (NHLS) for the early infant HIV diagnosis coverage showed an increased coverage of 10.6 percentage points to 91.6% in 2012/13, this being above the national average of 73.8%. The infant 1st PCR test positive at 6 weeks rate (DHIS data) dropped from 8.0% in 2011/12 to 3.1% in 2012/13, which is recorded as the highest in the province. There may be some data quality issues with this indicator, since the proportion of PCR tests found to be HIV-positive for infants under two months of age, based on NHLS data, has been below 8% since 2009/10 and was 2.0% in 2012/13.

The immunisation coverage under 1 year dropped from 109.8% in 2011/12 to 94% in 2012/13, which was on par with the national average. The measles 1st to 2nd dose drop-out rate at 23.2% was higher than the provincial rate of 19.8%.

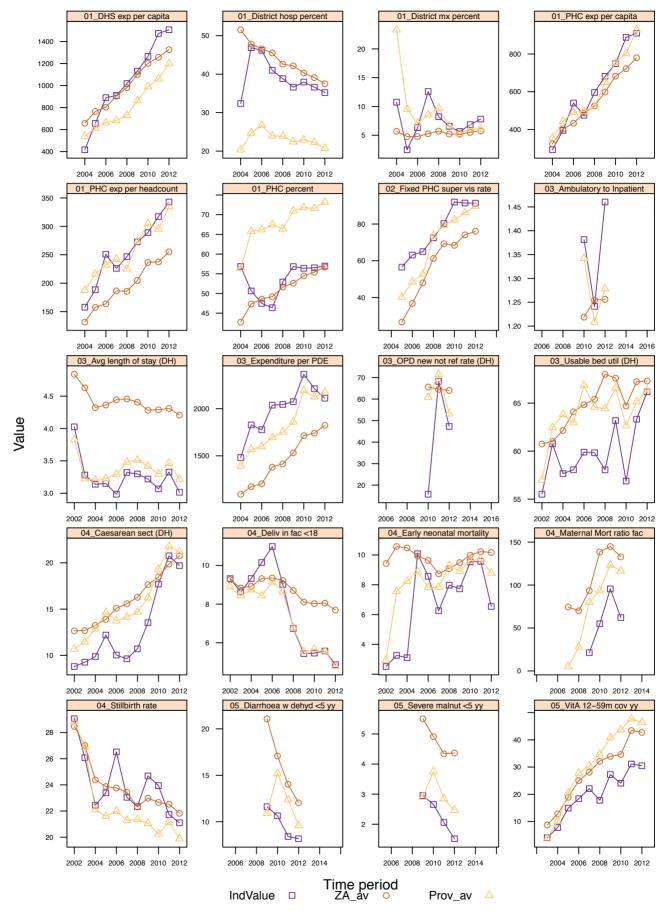
The child under 5 years diarrhoea with dehydration incidence at 8.2 episodes per 1 000 children in 2012/13 was lower than the provincial incidence of 9.6 episodes per 1 000 children under five years. The child under 5 years diarrhoea case fatality rate decreased by 2.7 percentage points to 3.1% in 2012/13, lower than the provincial average of 3.3%. The child under 5 years pneumonia incidence dropped from 77.0 cases per 1 000 children in 2011/12 to 58.7 cases per 1 000 children in 2012/13, and the pneumonia case fatality rate of 1.7% was lower than the provincial average of 2.3%. The child under 5 years severe acute malnutrition incidence dropped from 2.1 cases per 1 000 children in 2011/12 to 1.5 cases per 1 000 children in 2012/13, the lowest recorded incidence among the NHI districts. The child under 5 years acute malnutrition case fatality rate, however, increased steadily from 10.9% in 2010/11 to 18.8%, higher than the provincial and national averages of 12.1% and 12.7% respectively. The vitamin A coverage 12 to 59 months was 30.5%, representing the lowest performance in the province.

The cervical cancer screening coverage in 2012/13 at 38.1% reflected a drop of 2.0 percentage points. The couple year protection rate of 25.0% was the second lowest in the country and the lowest ranking among the NHI districts – the national average for this indicator was 37.8%.

In 2012/13, the incidence of TB (all cases) was 424.1 per 100 000 people, below the provincial average of 448.3 per 100 000 people, and the TB case finding index was 2.3%. The number of new pulmonary smear-positive cases diagnosed with TB decreased from 3 676 in 2011 to 2 788 in 2012 and the TB incidence (new pulmonary smear-positive) was recorded as 101.4 per 100 000 people, lower than the provincial average of 163.8 per 100 000 people. The TB (new pulmonary smear-positive)

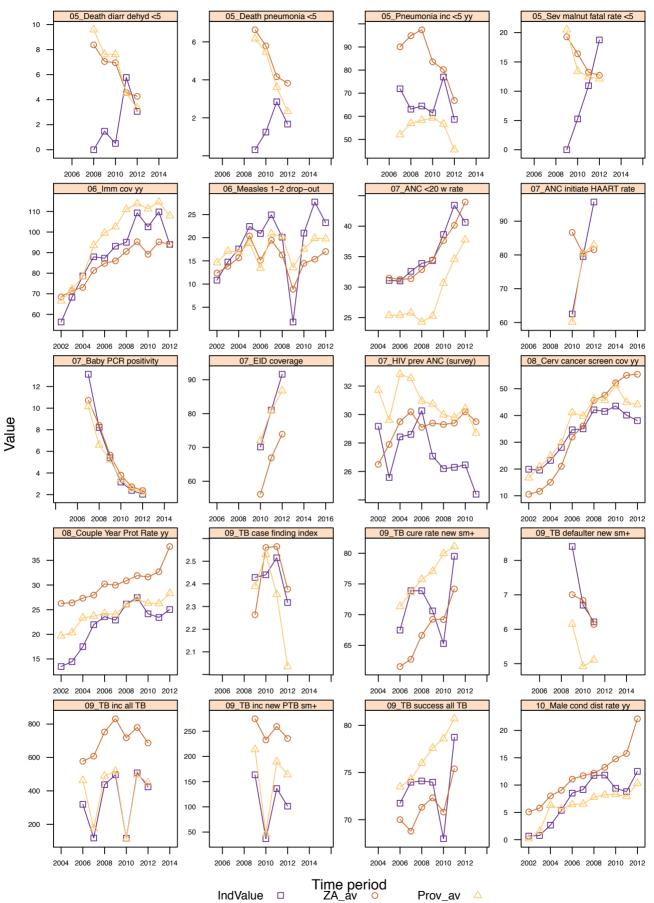
positive) cure rate increased from 65.3% in 2010 to 79.5% in 2011. The TB (new pulmonary smear-positive) defaulter rate was 6.2%, and the TB treatment success rate (all cases) increased from 68.0% in 2011 to 78.7% in 2012, which was higher than the national average of 75.4%.

The male condom distribution rate increased from 8.8 condoms per male 15 years and older to 12.5 condoms per male 15 years and older; however, this remains low, and below the national average of 22.1. The total number of adults remaining on ART at the end of 2010/11 decreased from 35 629 to 31 447 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month total increased from 127 to 354 in the same period.



## Annual indicators for district: Tshwane: TSH

## Annual indicators for district: Tshwane: TSH



# 15 KwaZulu-Natal Province

# **Ugu District Municipality**

Ugu District in KwaZulu-Natal has an estimated medical scheme coverage of 7.3%.

The proportion of district health services expenditure on district management at 1.7% was lower than the provincial average of 2.1%. The proportion of health expenditure on district hospitals was 40.1%, below the provincial average of 41.9%. The proportion of district health services expenditure on primary health care (PHC) was 58.1%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 62.1% and well below the national average of 76.0%.

The inpatient bed utilisation rate of 74.6% was the second highest in the province and above the provincial rate of 63.2%. The average length of stay was 6.2 days and longer than the national average of 4.2 days. Expenditure per patient day equivalent was R1 548, which was below the national average of R1 823. The ratio of ambulatory to inpatient days was 1.2, indicating that the number of patients seen at the emergency/OPD units was 20% greater than the number of patients admitted as inpatients. The OPD new client not referred rate at 21.0% was the lowest provincially. This indicates that a low proportion of patients seen at the emergency units and/or the outpatient departments, bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was the highest provincially at 37.1% and well above the national rate of 20.8%. The delivery in facility under 18 years rate was 10.5%, also above the national rate of 7.7%. The facility maternal mortality ratio decreased from 276.4 per 100 000 live births in 2010/11 to 155.9. The stillbirth in facility rate remained stable at 23.5 per 1 000 births and was above the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate was 8.3 per 1 000 live births and below the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased from 35.1% in 2011/12 to 49.1%, and was above the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) at 41.9% was the second highest in the country. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage at 84.3% was well above the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.6% was higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) value of 2.2%.

Immunisation coverage under 1 year was 98.8% and above the national average of 94.0%. The measles 1st to 2nd dose drop-out rate at 4.9% was the lowest rate in the province.

The child under 5 years diarrhoea with dehydration incidence was 16.7 episodes per 1 000 children and had increased from 14.5 in 2011/12. This was higher than both the provincial (15.4) and national (12.0) averages. The child under 5 years diarrhoea case fatality rate increased from 3.4% to 4.5%. The child under 5 years pneumonia incidence decreased from 187.3 cases per 1 000 children in 2011/12 to 177.9 in 2012/13, but was well above the national incidence of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate decreased from 3.3% to 1.7% in the same period. The child under 5 years severe acute malnutrition incidence increased from 5.5 cases per 1 000 children in 2011/12 to 7.4 cases per 1 000 children, while the child under 5 years severe acute malnutrition case fatality rate decreased from 14.5% to 11.3% during 2012/13. The vitamin A coverage in children aged 12 to 59 months was 44.1%, a decrease from 45.3% in 2011/12 and the third highest coverage in the province.

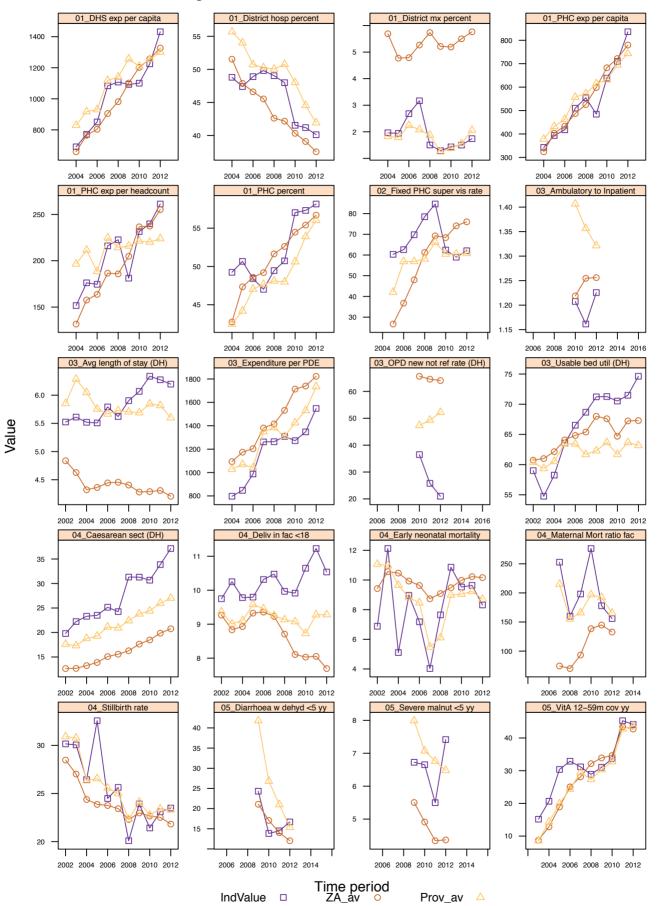
The couple year protection rate increased slightly from 27.0% in 2011/12 to 32.3% in 2012/13, but was below the national average of 37.8%. The cervical cancer screening coverage also increased from 71.9% to 95.3% in the same period and was well above the national rate of 55.4%.

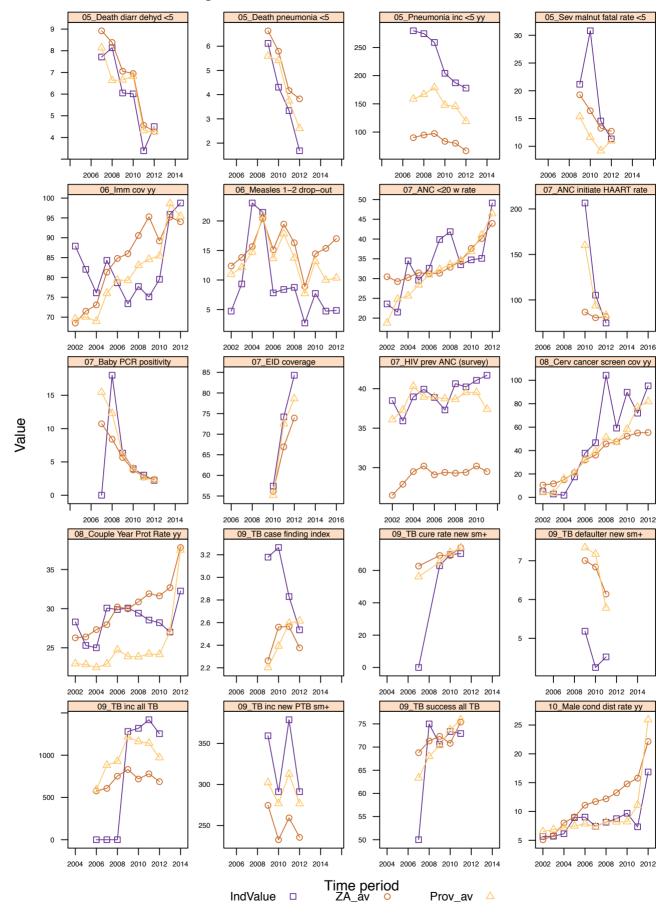
The TB incidence (all cases) was 1 254.2 per 100 000 people and decreased from 1 419.5 in 2011; however, it was still the highest incidence nationally. The TB case finding index was 2.5% and on par with the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 897 in 2011 to 2 237 in 2012. The TB incidence (new pulmonary smear-positive) was 291.3 per 100 000 people and above the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 70.1% and below the national rate of 74.2%. The TB defaulter rate (new pulmonary smear-positive) of 4.5% was below the national rate of 6.1%, and the TB new client treatment success rate (all cases) was also below average at 72.9%.

The male condom distribution coverage increased from 7.3 condoms per male 15 years and older in 2011/12 to 16.9 condoms in 2012/13. It was, however, below the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 30 519 at the end of 2010/11 to 45 588 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month however, decreased from 3 827 to 3 304 in the same period.

## Abraham Malaza

## Annual indicators for district: Ugu: DC21





#### Annual indicators for district: Ugu: DC21

## uMgungundlovu District Municipality

# Livhuwani Mashudu Mashamba

uMgungundlovu District in KwaZulu-Natal has the second highest medical scheme coverage provincially, estimated at 15.7%. The district is also a National Health Insurance (NHI) pilot district.

The proportion of district health services expenditure on district management increased from 1.9% in 2010/11 to 3.9% in 2012/13, higher than the provincial average of 2.1%. The proportion of health expenditure on district hospitals was 34.6% in 2012/13, well below the provincial average of 41.9%. The proportion of district health services expenditure on primary health care (PHC) increased from 54.2% to 61.5% in the same period.

There was a decrease in the PHC supervisor visit rate (fixed clinic/CHC/CDC) rate from 45.1% in 2011/12 to 37.9% in 2010/11, the second lowest of all NHI districts.

The inpatient bed utilisation rate was 73.5%, the third highest in the province and higher than the national average of 67.3%. The average length of stay of 5.0 days was the third longest stay among the NHI districts. The average expenditure per patient day equivalent of R1 863 was in line with the national average of R1 823. The ratio of ambulatory to inpatient days at 1.8 was the second highest provincially. This indicates that nearly twice as many patients were seen at the emergency/ OPD units than were admitted as inpatients. The OPD new client not referred rate was 26.1%. This indicates that a low proportion of patients seen at the emergency units and/or the outpatient departments, bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was 26.3%. This was above the national rate of 20.8% and the highest among the NHI districts. The delivery in facility under 18 years rate was 9.8% and above the national rate of 7.7%. The facility maternal mortality ratio increased from 193.5 per 100 000 live births in 2011/12 to 279.4 and was the second highest nationally. The stillbirth in facility rate at 27.6 per 1 000 births was the second highest provincially, and the inpatient early neonatal death rate was 9.1 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 46.5% and slightly above the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) was 39.8%, the second highest among the NHI districts. The antenatal client initiated on ART rate was 80.1% and in line with the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage at 80.9% was above the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.5% was higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 1.7%.

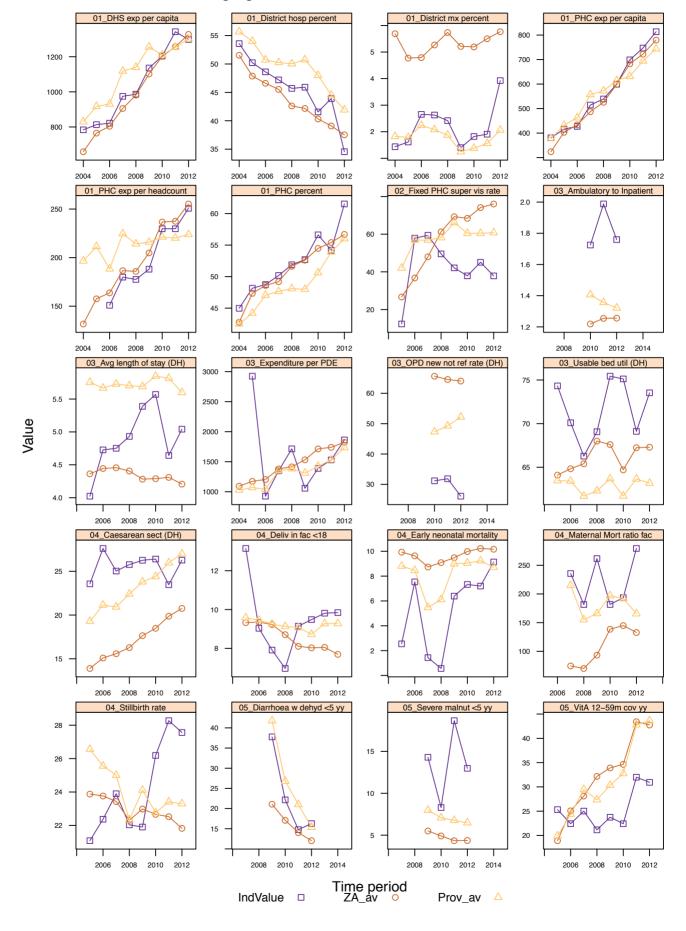
The immunisation coverage of children under 1 year increased sharply from 88.2% in 2011/12 to 103.7%. Coverage exceeding 100% may be due to poor data quality or an underestimation of the under-1 population. The measles 1st to 2nd dose drop-out rate increased from 2.6% 2011/12 to 9.3% in 2012/13.

The child under 5 years diarrhoea with dehydration incidence was 16.3 episodes per 1 000 children, and was higher than the provincial and national averages of 15.4 and 12.0 per 1 000 children respectively. The child under 5 years diarrhoea case fatality rate remained stable at 2.6% and was the second lowest in the province. The child under 5 years pneumonia incidence decreased from 186.8 cases in 2011/12 to 156.4 per 1 000 children; however, it was second highest in the country. The child under 5 years pneumonia case fatality rate decreased from 5.3% to 3.3% in the same period. The child under 5 years severe acute malnutrition incidence also decreased from 18.7 in 2011/12 to 13.0 cases per 1 000 children and was the second highest nationally. The child under 5 years severe acute malnutrition case fatality rate of 12.7%. The vitamin A coverage in children aged 12 to 59 months was the lowest provincially at 30.9%.

The couple year protection rate increased from 36.7% in 2011/12 to 57.8% in 2012/13 and was the third highest in the province. There was a marked increase in the cervical cancer screening coverage in the same period, from 70.8% to 92.9%.

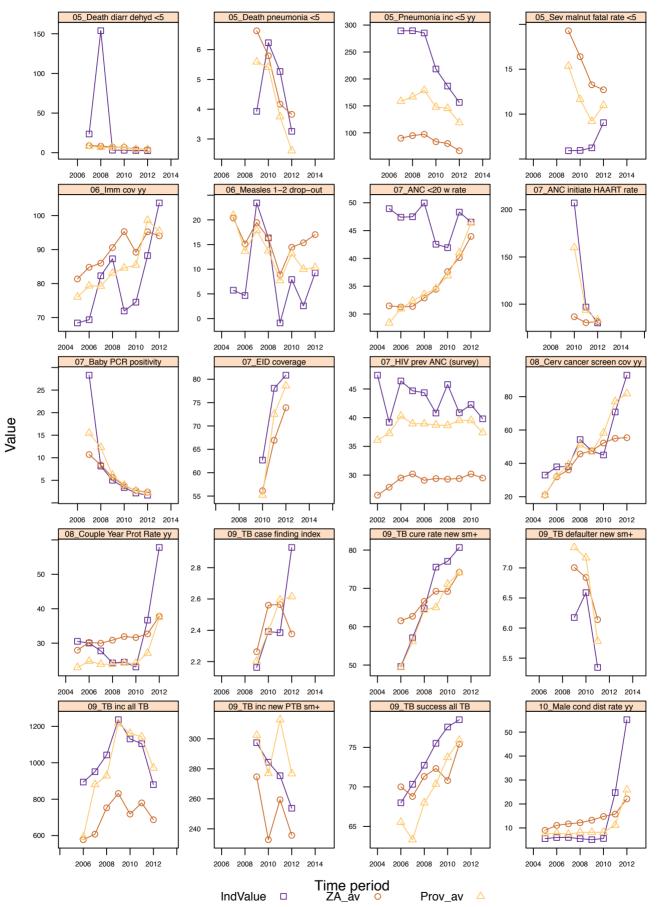
The TB incidence (all cases) was 879.7 per 100 000 people and decreased from 1 104.5 in 2011. This was above the national average of 687.3 per 100 000 people in 2011. The TB case finding index was 2.9% and above the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 936 in 2011 to 2 719 in 2012. The TB incidence (new pulmonary smear-positive) was 253.7 per 100 000 people and slightly above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 80.7%. The TB (new pulmonary smear-positive) defaulter rate was 5.3%, and the TB treatment success rate (all TB) was 78.5%, slightly better than the provincial and national averages.

The male condom distribution coverage increased from 24.7 condoms per male 15 years and older in 2011/12 to 55.2 condoms in 2012/13, and was above the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 47 918 at the end of 2010/11 to 77 530 by the end of 2012/13, and the total number of children under 15 years remaining on ART at end of the month also increased from 5 657 to 7 959 in the same period.



## Annual indicators for district: uMgungundlovu: DC22

#### Annual indicators for district: uMgungundlovu: DC22



# **Uthukela District Municipality**

## Mesuli Ntshalintshali

Uthukela District in KwaZulu-Natal Province (KZN) has an estimated medical scheme coverage of 5.0%, the second lowest in the province.

The proportion of health services expenditure on district management increased from 2.1% in 2011/12 to 2.8% in 2012/13, but was much lower than the national average of 5.8%, as was the case for almost all KZN districts. The percentage of health services expenditure on district hospitals was 37.0%, similar to the national average of 37.5%. The proportion of health services expenditure on primary health care (PHC) was 60.2%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) increased from 33.5% in 2011/12 to 45.6% in 2012/13, which was the lowest provincially and well below the national rate of 76.0%.

The inpatient bed utilisation rate was 56.4% and decreased from 64.1% in 2011/12. This was the third lowest in the province and below the provincial rate of 63.2%. The average length of stay was 5.1 days, longer than the national average of 4.2 days. Expenditure per patient day equivalent has fluctuated annually since 2007/08 and was R1 857 in 2012/13, slightly above the national average of R1 823. The ratio of ambulatory to inpatient days was 1.1, indicating that the number of patients seen at the emergency/OPD units was slightly higher than the number of patients admitted as inpatients. The OPD new client not referred rate was 49.3% and had increased from 37.0% in 2011/12, indicating that almost half of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate dropped from 23.9% in 2011/12 to 22.5% in 2012/13 and was above the national rate of 20.8%. The facility maternal mortality ratio has changed from 105.4 per 100 000 live births in 2008/09 to 221.9 per 100 000 live births in 2012/13, the third highest in the province. The stillbirth rate was 24.4 per 1 000 births and slightly above the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate, at 6.6 per 1 000 live births, and was the third lowest provincially and below the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased from 36.6% in 2011/12 to 39.5%, and was the lowest rate in the province and below the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) at 33.4% was the second lowest provincially, but above the national prevalence of 29.5%. The antenatal client initiated on ART rate was the lowest in the province at 71.0% and below the national rate of 81.6%. Data from the National Health Laboratory Service (NHLS) showed that the early infant HIV diagnosis coverage increased from 61.6% in 2011/12 to 82.2% and was above the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.2% was the same as the proportion of PCR tests HIV positive for infants under two months of age (NHLS data).

Immunisation coverage under 1 year was 97.8% and slightly above the national average of 94.0%. The measles 1st to 2nd drop-out rate decreased from 14.9% in 2011/12 to 12.7% in 2012/13; this was below the national average of 17.0%.

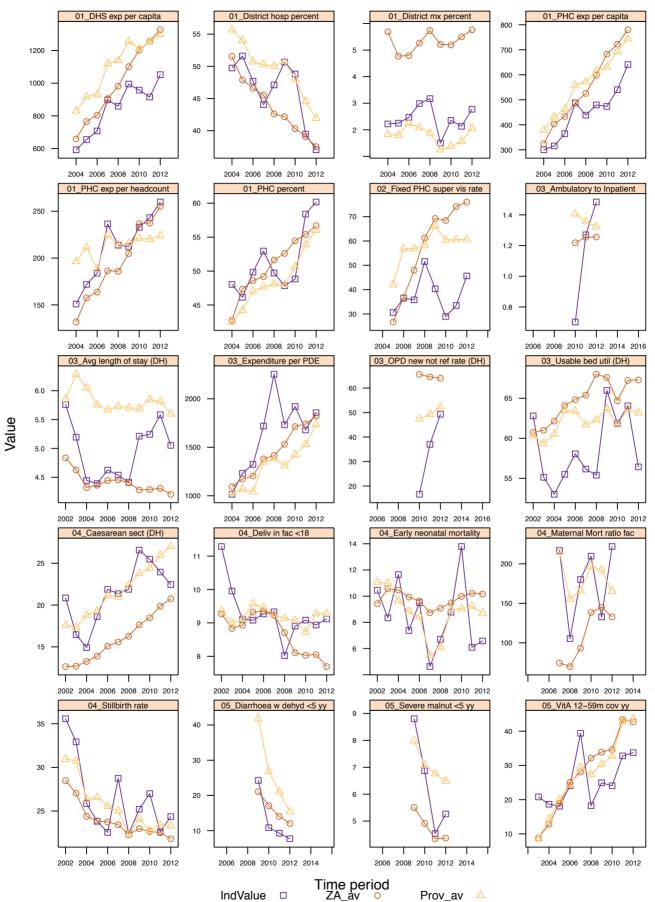
The child under 5 years diarrhoea with dehydration incidence at 7.7 per 1 000 children was the lowest provincially, and was much lower than the provincial average of 15.4 and the national average of 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate was 4.1% and increased from 3.5% in 2011/12. The child under 5 years pneumonia incidence was also the lowest in the province at 66.9 per 1 000 children, and on par with the national incidence of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate decreased from 5.1% 2011/12 to 2.9% in 2012/13 and was below the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence was 5.3 per 1 000 children. The child under 5 years severe acute malnutrition above the national rate of 12.7%. Vitamin A coverage 12 to 59 months was 33.7% in 2012/13 and was below the national average of 42.8%.

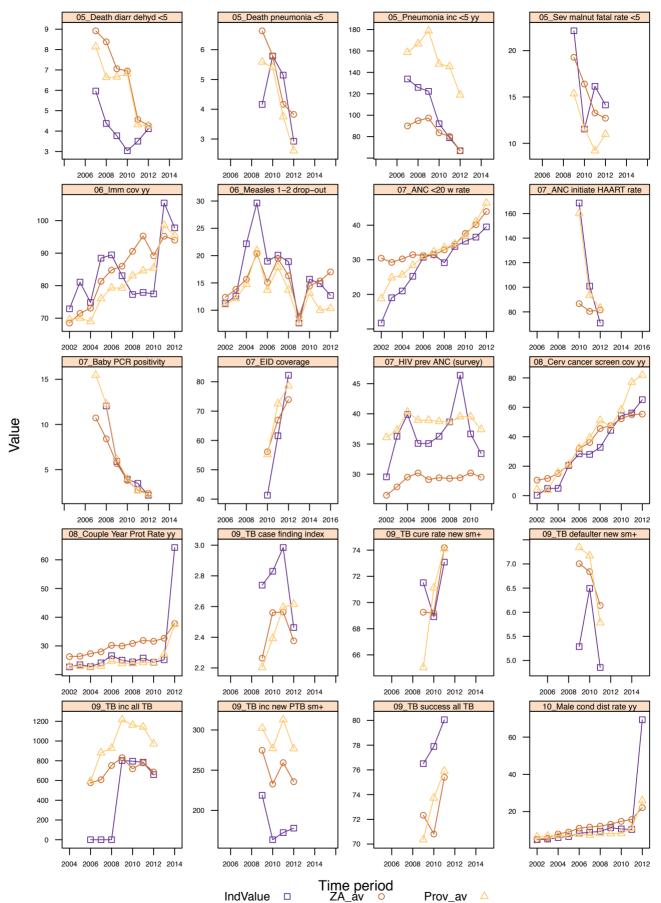
The couple year protection rate increased dramatically from 25.2% in 2011/12 to 64.3% in 2012/13, and was the second highest in the province. This was well above the national average of 37.8%, and is due to a concomitant increase in male condom distribution, which is encouraging. Cervical cancer screening coverage also increased from 56.2% to 65.2% in the same period and was well above the national rate of 55.4%.

The TB incidence (all cases) was 659.5 per 100 000 people and decreased from 785.0 in 2011. Uthukela was one of only two districts in the province with an incidence below the national average of 687.3 per 100 000 people in 2011. The TB case finding index was 2.5% and on par with the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) increased slightly from 1 206 in 2011 to 1 250 in 2012. The TB incidence (new pulmonary smear-positive) was 177.9 per 100 000 people, being the lowest in the province and well below the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 73.1% and below the national rate of 74.2%. The TB (new pulmonary smear-positive) defaulter rate decreased from 6.5% in 2010 to 4.9% in 2011 and was lower than the national rate of 6.1%. The TB treatment success rate (all TB) at 80.1% was the second highest in the province.

The male condom distribution coverage at 69.3 condoms per male 15 years and older was the best coverage in the country and is three times higher than the national coverage of 22.1. The total number of adults remaining on ART at end of the month increased from 32 544 at the end of 2010/11 to 37 500 by the end of 2012/13, and the total number of children under 15 years remaining on ART at end of the month also increased, from 2 626 to 3 229 in the same period.

#### Annual indicators for district: Uthukela: DC23





### Annual indicators for district: Uthukela: DC23

## **Umzinyathi District Municipality**

Mangoba Mthemba and Abraham Malaza

Umzinyathi is one of the three National Health Insurance (NHI) pilot districts in KwaZulu-Natal. The proportion of the district's population with medical scheme coverage was estimated to be 7.0%.

The proportion of district health services expenditure on district management was 2.2%, in line with the provincial average of 2.1%. The proportion of district health services expenditure on district hospitals amounted to 60.7%, well above the provincial average of 41.9%. The proportion of district health services expenditure on primary health care (PHC) at 37.1% was the lowest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) declined from 68.8% in 2011/12 to 59.2% in 2012/13, and was below the national rate of 76.0%.

The inpatient bed utilisation rate was 57.7% and below the provincial rate of 63.2%. The average length of stay, at 6.0 days, was the longest among the NHI pilot sites. Expenditure per patient day equivalent was R1 882 in 2012/13 compared to R1 522 in 2011/12. The ratio of ambulatory to inpatient days decreased slightly from 1.3 to 1.1 between 2011/22 and 2012/13, the lowest rate in the province. This indicates that the number of patients seen at the emergency/OPD units was in line with the number of patients admitted as inpatients. The OPD new client not referred rate was 73.9%, the second highest in the province. This indicates that a very high percentage of patients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was 23.1%, and was above the national rate of 20.8%. The delivery in facility under 18 years rate was 9.7% and above the national rate of 7.7%. The facility maternal mortality ratio decreased from 141.2 per 100 000 live births in 2009/10 to only 34.7 per 100 000 live births in 2012/13, the lowest in the province. The stillbirth in facility rate at 18.0 per 1 000 births was the lowest provincially. The inpatient early neonatal death rate was 7.5 per 1 000 live births, below the provincial and national averages.

The antenatal 1st visit before 20 weeks rate was 49.8% and slightly above the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) at 24.6% was the lowest provincially. The antenatal client initiated on ART rate was 83.5% and slightly above the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage at 86.1% was above the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 1.5% was in line with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 1.9%, and was the second lowest among the NHI districts.

Immunisation coverage under 1 year was 100.7%. However, a coverage value exceeding 100% may be due to poor data quality or an underestimation of the population under one year. The measles 1st to 2nd dose drop-out rate increased from 9.3% in 2011/12 to 11.4% in 2012/13; however, this was below the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was 6.9 per 1 000 children, and was much lower than the provincial average of 15.4. The child under 5 years diarrhoea case fatality rate decreased from 7.5% in 2011/12 to 4.3%. The child under 5 years pneumonia incidence decreased from 86.9 in 2011/12 to 71.4 per 1 000 children and was the third lowest provincially, whereas the child under 5 years pneumonia case fatality rate remained stable at 4.1%. The child under 5 years severe acute malnutrition incidence was 6.2 per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate was the highest provincially at 30.5%. The vitamin A coverage in children aged 12 to 59 months was 43.1% and decreased from 46.7% in 2011/12.

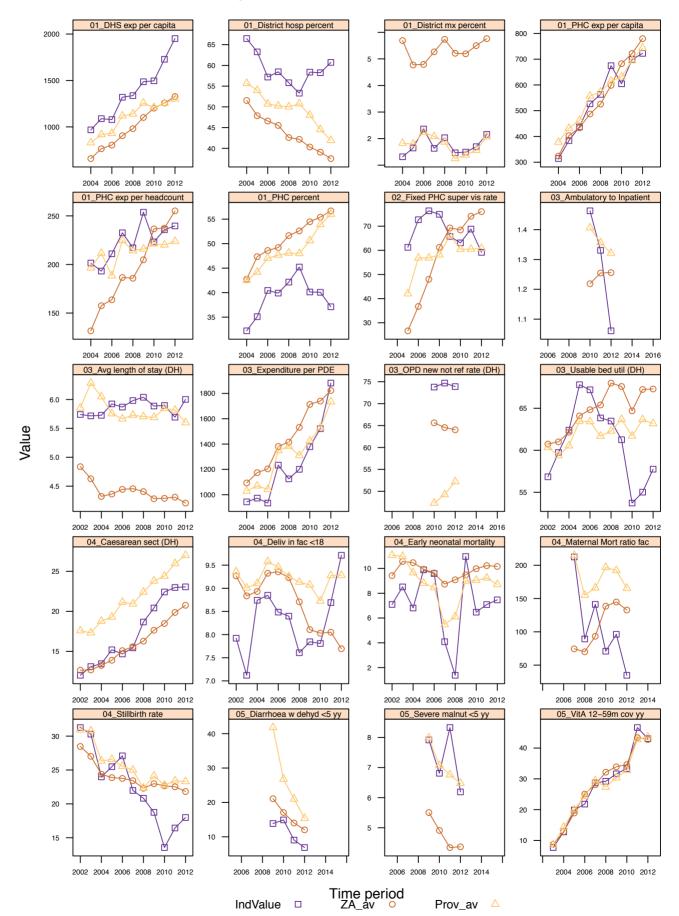
The couple year protection rate increased from 32.7% in 2011/12 to 37.8%. The cervical cancer screening coverage was 140.2% and has been sustained above 100%<sup>a</sup> since 2009/10.

The TB incidence (all cases) was 818.1 per 100 000 people and decreased from 993.3 in 2011. This was above the national average of 687.3 per 100 000 people in 2012. The TB case finding index was 3.0% and above the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 1 227 in 2011 to 1 278 in 2012. The TB incidence (new pulmonary smear-positive) was 246.8 per 100 000 people and slightly above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 80.7% in 2011 and the highest among the NHI districts. The TB (new pulmonary smear-positive) defaulter rate was the lowest in the country at 1.1%, although with a fairly high treatment failure rate of 3.0%. The TB treatment success rate (all TB) was just above the national average at 77.1%.

The male condom distribution coverage increased from 13.1 condoms per male 15 years and older in 2011/12 to 42.8 condoms in 2012/13. It was the third highest coverage among the NHI districts and well above the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 26 239 at the end of

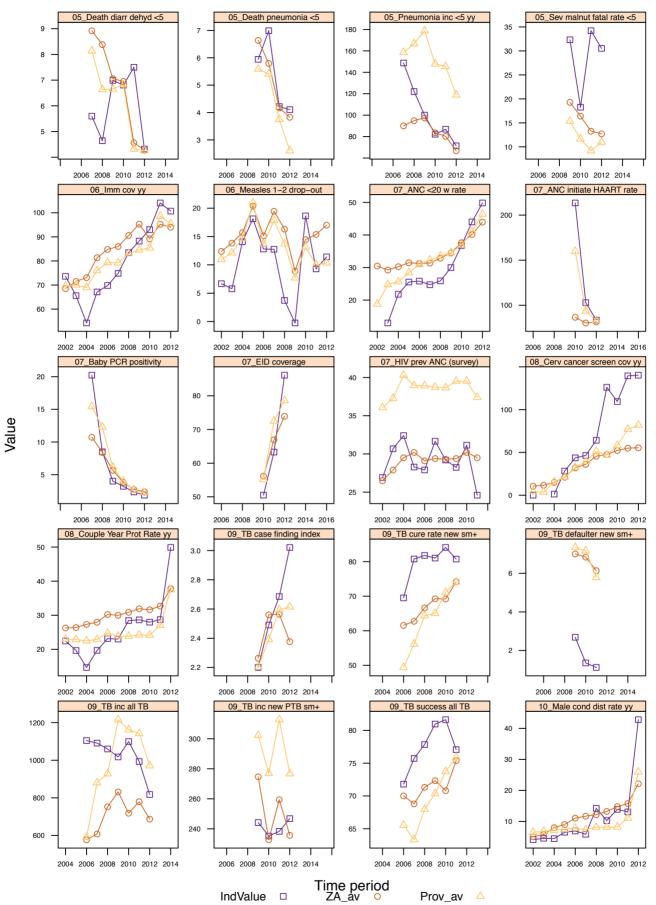
a Coverage exceeding 100% may be due to poor data quality or an underestimation of the population 30 years and older. Since the indicator is based on screening women 30 years and over once in 10 years, and consequently uses 10% of the target population in the denominator, it is quite possible for intensive roll-out of the policy to result in coverage over 100% for some years as the backlog of unscreened women is addressed.

2010/11 to 34 137 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month increased from 2 110 to 2 934 in the same period.



#### Annual indicators for district: Umzinyathi: DC24

## Annual indicators for district: Umzinyathi: DC24



# **Amajuba District Municipality**

## Abraham Malaza

Amajuba District is situated on the north west of KwaZulu-Natal Province and has an estimated medical scheme coverage of 9.4%. The district is also a National Health Insurance (NHI) pilot district.

The proportion of district health services expenditure on district management was 6.4%, which was higher than the provincial average of 2.1%. The proportion of total district expenditure on primary health care (PHC) increased from 46.8% in 2010/11 to 79.0% and was the highest provincially. The proportion of total district health services expenditure on district hospitals was low at 14.7%, having decreased from 50.2% in 2011/12 and being well below the provincial average of 41.9%. The reason for these huge shifts in expenditure is that about 80% of the expenditure recorded under District Hospitals in previous years was for the two regional hospitals, Madadeni and Newcastle. Expenditure on Niemeyer Memorial (the Amajuba district hospital) has remained consistent.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) declined annually from 90.8% in 2008/09 to 50.3% in 2012/13. This was the third lowest rate among the NHI pilot districts.

At 53.5%, the inpatient bed utilisation rate was the second lowest provincially, the lowest among the NHI districts and the fifth lowest in the country. The average length of stay was 3.0 days, the shortest in the province. The expenditure per patient day equivalent at R1 438 was the second lowest in the province and well below the national average of R1 823. The ratio of ambulatory to inpatient days at 7.9 was the highest in the country and indicates that about eight times more patients were seen at the emergency/OPD units than were admitted as inpatients. The OPD new client not referred rate was 46.3%. This indicates that a relatively lower percentage of clients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was 23.3%, slightly above the national rate of 20.8%. The delivery in facility under 18 years rate was 9.9% and above the national rate of 7.7%. The facility maternal mortality ratio decreased from 173.4 per 100 000 live births in 2011/12 to 124.6 and was below the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate was 25.9 per 1 000 births, the third highest provincially. At 2.9 per 1 000 live births, the inpatient early neonatal death rate was the lowest in the country. This rate has fluctuated annually between 10.5 and 0.1 per 1 000 live births since 2004/05 and dropped from 4.4 per 1 000 live births in 2011/12. Given the relatively high stillbirth rate, this finding should be investigated.

The antenatal 1st visit before 20 weeks rate at 41.3% was the second lowest provincially and below the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) remained stable at 35.3%. The antenatal client initiated on ART rate was 81.1% and in line with the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 66.3% and below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 1.5% matched the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 1.8% and was the second lowest in the province.

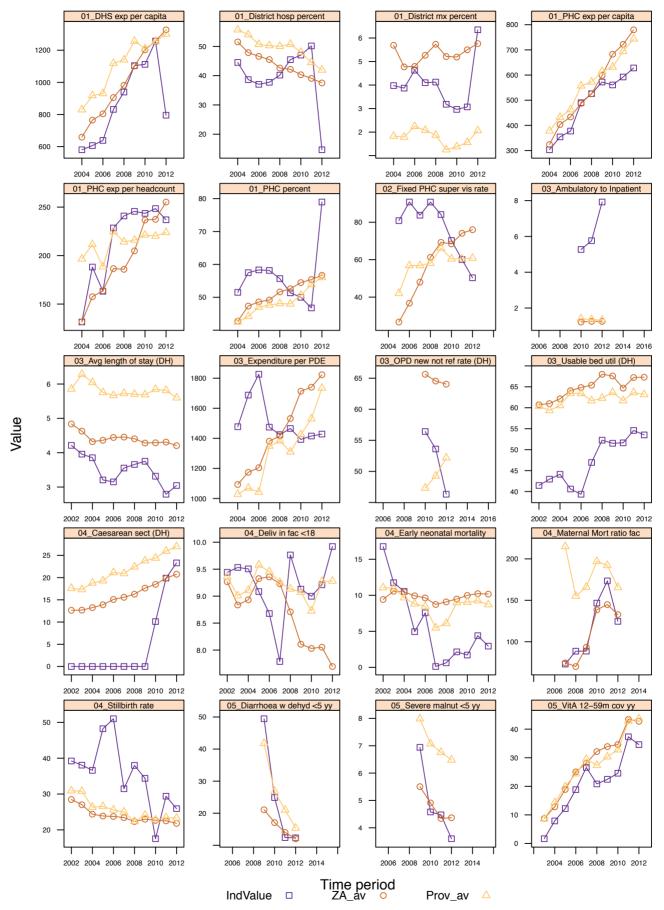
Immunisation coverage under 1 year increased from 77.7% in 2011/12 to 81.2%. However, this was still below the national coverage of 94.0%. The measles 1st to 2nd dose drop-out rate increased from 9.4% to 13.0% during 2012/13 but was still the third lowest among the NHI districts.

The child under 5 years diarrhoea with dehydration incidence remained stable at 12.3 episodes per 1 000 children between 2011/12 and 2012/13, and was lower than the provincial average of 15.4 but higher than the national average of 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate declined from 4.0% to 1.0% and was the lowest in the province. The child under 5 years pneumonia incidence decreased from 132.3 cases per 1 000 children in 2011/12 to 114.8 cases per 1 000 children; however, this was still much higher than the national average (82.3 per 1 000). The child under 5 years severe acute malnutrition incidence also decreased from 4.5 in 2011/12 to 3.6 cases per 1 000 children, and the severe acute malnutrition case fatality rate decreased from 20.0% to 9.7% in 2012/13 and was below the national rate of 12.7%. The vitamin A coverage in children aged 12 to 59 months was 34.6%.

The cervical cancer screening coverage was 60.7% and the lowest in the province. The couple year protection rate of 65.3% was the highest provincially after a huge increase from 28.0% the previous year, driven primarily by the rise in male condom distribution.

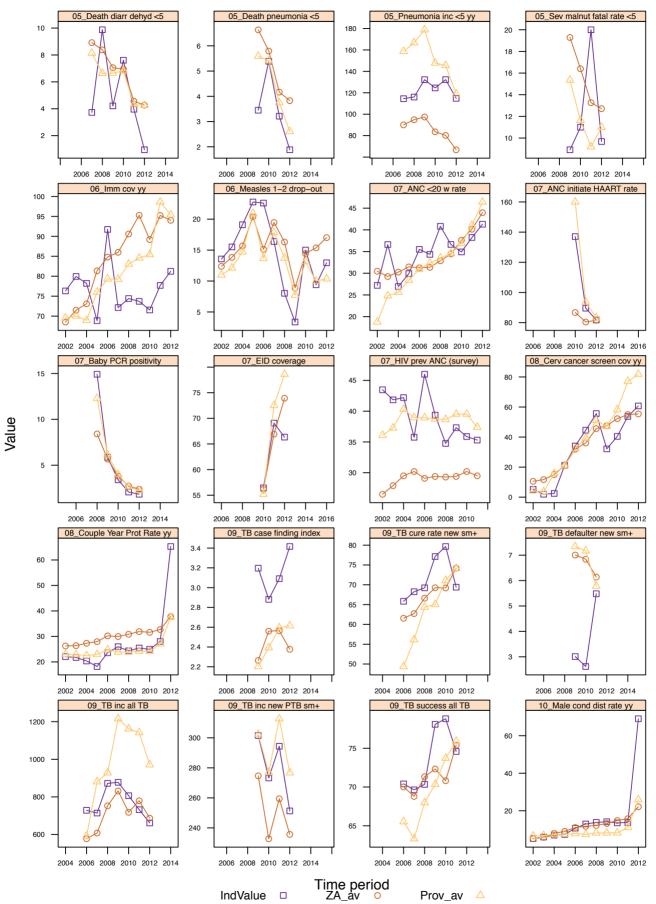
The TB incidence (all cases) was 661.5 per 100 000 people, being the lowest provincially and below the national average of 687.3 per 100 000 people. The TB case finding index was 3.4% and above the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 514 in 2011 to 1 300 in 2012, resulting in a decrease of the TB incidence (new pulmonary smear-positive) from 294.4 per 100 000 people in 2011 to 251.3. This was, however, still above the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 69.4%, the second lowest in the province. The TB defaulter rate (new pulmonary smear-positive) was 5.5%, and the TB treatment success rate (all TB) was 74.6%.

The male condom distribution coverage increased markedly from 13.7 condoms per male 15 years and older in 2011/12 to 69.0 condoms in 2012/13. This was the highest coverage among the NHI districts, second highest provincially and well above the national average of 22.1. The total number of adults remaining on ART at end of the month increased from 20 961 at the end of 2010/11 to 30 445 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 432 to 2 901 in the same period.



## Annual indicators for district: Amajuba: DC25

## Annual indicators for district: Amajuba: DC25



# **Zululand District Municipality**

# Willias Zendera

Zululand is geographically the largest of the 11 districts in KwaZulu-Natal, situated in the north-eastern part of the province. The proportion of the district population with medical scheme coverage is estimated to be 6.5%.

The proportion of district health services expenditure on primary health care (PHC) in 2012/13 was 45.3%, and the proportion of district health services expenditure on district management of 1.0% was the lowest in the country. The percentage of expenditure on district hospital services decreased slightly from 54.6% to 53.7% between 2011/12 and 2012/13.

There was an increase in the PHC supervisor visit rate (fixed clinic/CHC/CDC) from 54.8% in 2011/12 to 71.3% in 2012/13, above both the national average of 76.0% and national target of 80%.

The inpatient bed utilisation rate for 2012/13 was 66.0%, a decrease from 68.9% in 2011/12. The average length of stay for 2012/13 of 6.1 days was the sixth longest in the country. The average expenditure per patient day equivalent in 2012/13 was R1 779, slightly lower than the national average of R1 823. The ratio of ambulatory to inpatient days in 2012/13 was 1.1. The OPD new client not referred rate in 2012/13 was 57.0%, indicating that more than half of patients seen at the emergency/ OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate increased from 22.1% in 2011/12 to 24.2% in 2012/13. This was above the national average of 20.8%. The delivery in facility under 18 years rate remained stable at 10.8%. The facility maternal mortality ratio dropped substantially from 152.2 per 100 000 live births in 2011/12 to 111.6 per 100 000 live births in 2012/13, lower than the provincial average of 165.5 but higher than the national average of 132.9. The stillbirth rate rose from 18.8 per 1 000 births in 2011/12 to 21.4. The inpatient early neonatal death rate of 7.9 per 1 000 live births was higher than the provincial average of 8.7 per 1 000 live births, although the rate has fluctuated so widely that it is difficult to interpret.

The antenatal 1st visit before 20 weeks rate improved from 42.3% in 2011/12 to 48.3% in 2012/13. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) was 39.3%. The antenatal client initiated on ART rate of 84.9% in 2012/13 was much lower than the 96.9% of 2011/12, but higher than the national average of 81.6% for 2012/13. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 80.1% and above the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) value of 2.5% was higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 3.0%.

The immunisation coverage under 1 year remained stable at 79.9% but was the lowest provincially. The measles 1st to 2nd drop-out rate decreased from 13.4% to 9.5% in the same period.

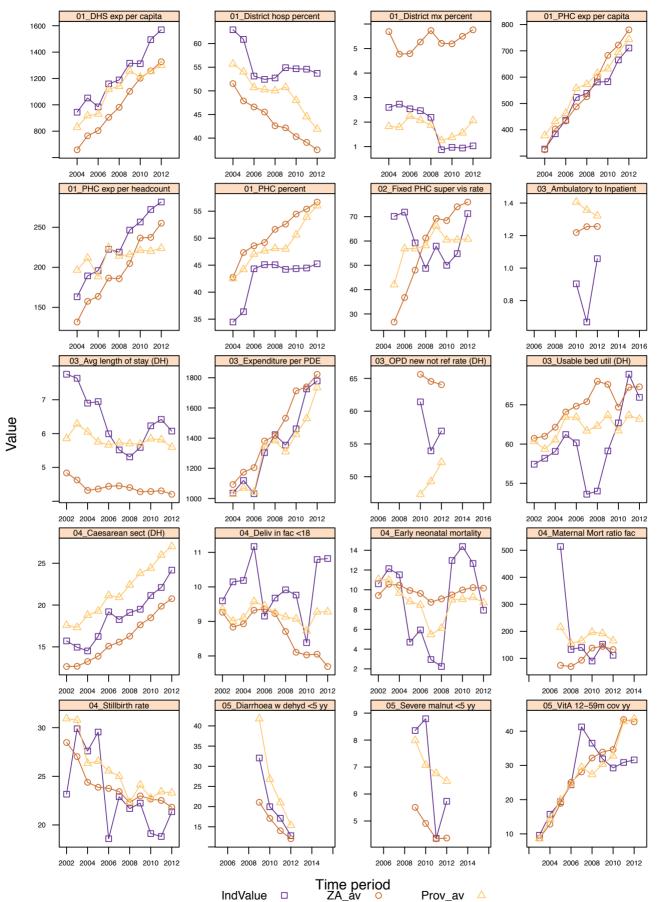
The child under 5 years diarrhoea with dehydration incidence in 2012/13 was 12.8 per 1 000 children, the fifth lowest in the province and in line with the national average of 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate of 4.8% was higher than the provincial average of 4.3%. The child under 5 pneumonia incidence was the second lowest in the province at 68.2 per 1 000 children and slightly above the national average of 66.8 per 1 000 children. However, the child under 5 years pneumonia case fatality rate of 5.7% was above the national average of 3.8%. The child under 5 years severe acute malnutrition incidence was 5.7 per 1 000 children and was below the provincial average of 6.5 per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate of 19.3% was the second highest in the province and much higher than the national average of 12.7%. Vitamin A coverage 12 to 59 months was 31.6%, which was lower than provincial average of 43.6% and the national average of 42.8% in 2012/13.

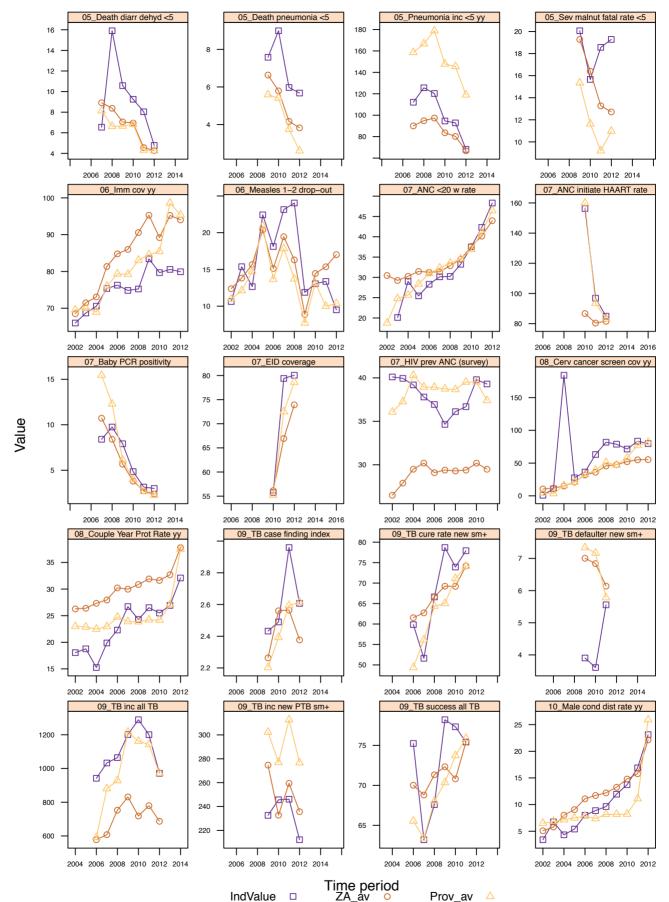
The couple year protection rate increased from 26.9% in 2011/12 to 32.1% in 2012/13. The cervical cancer screening coverage was 79.8% and has been around 80% since 2008/09.

The TB incidence (all cases) was 971.2 per 100 000 people and decreased from 1 200.5 in 2011, and was above the national average of 687.3. The TB case finding index was 2.6% and on par with the provincial index. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 106 in 2011 to 1 829 in 2012. The TB incidence (new pulmonary smear-positive) was 212.2 per 100 000 people and was below the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 77.9% and the TB defaulter rate (new pulmonary smear-positive) 5.6%. The TB treatment success rate (all TB) was 75.4%.

The male condom distribution rate increased from 16.9 condoms per male 15 years and older in 2011/12 to 23.1 in 2012/13, and was in line with the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 24 481 at the end of 2010/11 to 50 060 by the end of 2012/13, and the total number of children under 15 years remaining on ART at end of the month also increased from 1 348 to 4 394 in the same period.

#### Annual indicators for district: Zululand: DC26





### Annual indicators for district: Zululand: DC26

## **Umkhanyakude District Municipality**

## Abraham Malaza

Umkhanyakude District in KwaZulu-Natal Province is bordered by Mozambique to the north, and Zululand and Uthungulu districts to the west and south respectively. The proportion of the population with medical scheme coverage was estimated to be 3.9%, the lowest provincially.

The proportion of district health services expenditure on district management was 1.2%, somewhat lower than the provincial average of 2.1%. The proportion of health expenditure on district hospitals was 53.0%, above the provincial average of 41.9%. The proportion of district health services expenditure on primary health care (PHC) at 45.9% was the third lowest in the province and decreased from 47.1% in 2011/12.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) declined from 96.5% in 2011/12 to 86.0% in 2012/13. This was, however, still the best performance in the province and above the national rate of 76.0%.

The inpatient bed utilisation rate was 59.8% and below the provincial rate of 63.2%. The average length of stay was 5.5 days and longer than the national average of 4.2 days. Expenditure per patient day equivalent increased from R1 585 in 2011/12 to R1 814 in 2011/12 and was slightly below the national average of R1 823. The ratio of ambulatory to inpatient days decreased and was 1.2, which indicates that the number of patients seen at the emergency/OPD units was slightly higher than the number of patients admitted as inpatients. The OPD new client not referred rate was 51.4% and increased from 39.2% in 2011/12. This indicates that more than half of new patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was 21.2%, slightly above the national rate of 20.8%. The delivery in facility under 18 years rate was 11.3%, the highest rate in the province and above the national rate of 7.7%. The facility maternal mortality ratio increased from 68.1 per 100 000 live births in 2011/12 to 96.7 per 100 000 live births. The stillbirth in facility rate, at 18.2 per 1 000 births, increased from 16.6 in 2011/12 but was below the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate at 5.7 per 1 000 live births was the second lowest provincially and well below the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased from 48.1% in 2011/12 to 54.2%. This rate was the highest in the province and above the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) at 41.1% was the third highest nationally. The antenatal client initiated on ART rate was 83.7% and slightly above the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage at 53.6% was the second lowest provincially and well below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 3.3% was above the value of the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.6%.

Immunisation coverage under 1 year was 104.0% in 2012/13. However, a coverage value exceeding 100% may be due to poor data quality or an underestimation of the under-1 population. The measles 1st to 2nd drop-out rate increased from 12.8% in 2011/12 to 15.9% during 2012/13, and was the highest rate in the province but below the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence remained stable at 16.9 per 1 000 children, and was higher than the provincial average of 15.4 and the national average 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate increased from 4.4% in 2011/12 to 8.0% in 2012/13, ranking as the highest provincially and the sixth highest in the country. The child under 5 years pneumonia incidence decreased from 124.0 per 1 000 children in 2011/12 to 120.2 per 1 000 children, but was well above the national incidence of 66.8 per 1 000 children. However, the child under 5 years pneumonia case fatality rate decreased from 5.3% to 1.9% in the same period and was below the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence also increased from 8.0 per 1 000 children in 2011/12 to 9.1 per 1 000 children in 2012/13, and was the second highest in the province and the third highest in the country. The child under 5 years severe acute malnutrition case fatality rate decreased from 17.6% to 10.0% in the same period and was below the national was below the national rate of 12.7%. The vitamin A coverage in children aged 12 to 59 months was 33.2%. This was the third lowest coverage in the province and well below the national average of 42.8%.

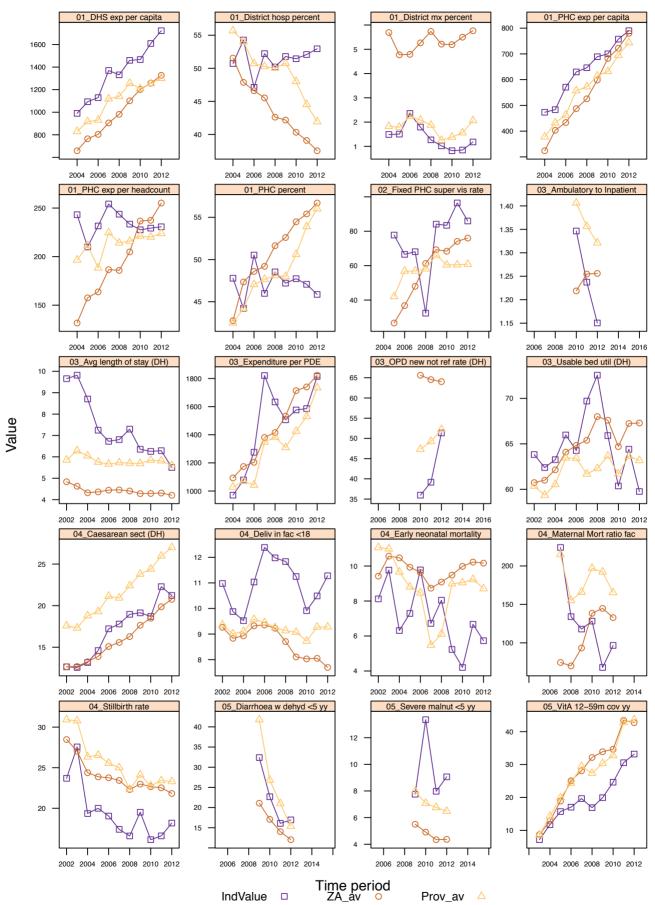
The couple year protection rate increased from 29.2% in 2011/12 to 31.5% and was below the national average of 37.8%. The cervical cancer screening coverage decreased from 90.6% to 82.9% in the same time period but was well above the national rate of 55.4%.

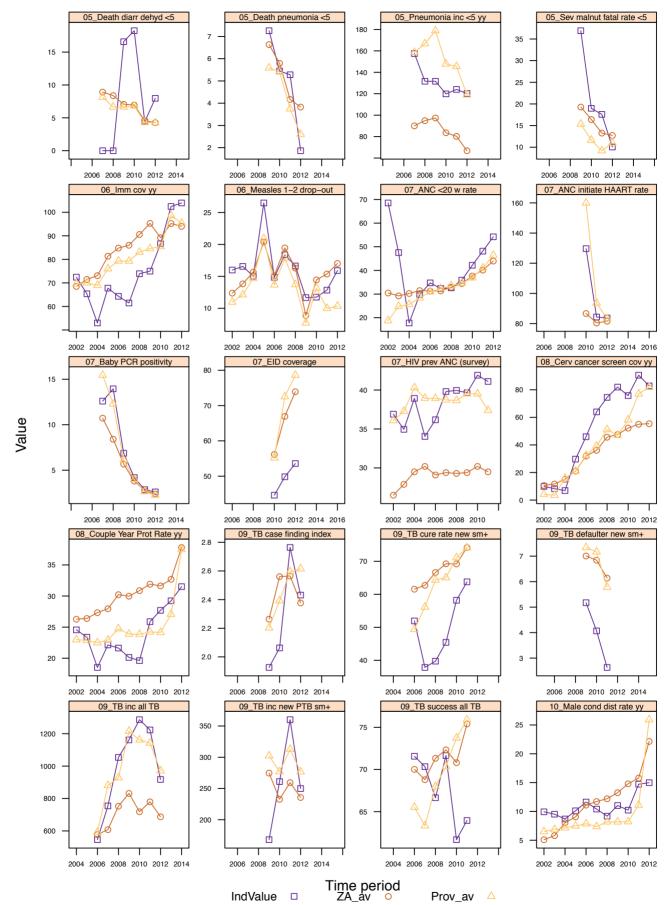
The TB incidence (all cases) was 917.7 per 100 000 people and decreased from 1 223.1 in 2011. It was above the national average of 687.3 per 100 000 people in 2011. The TB case finding index was 2.4% and below the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 378 in 2011 to 1 666 in 2012. The TB incidence (new pulmonary smear-positive) decreased from 360.1 per 100 000 people in 2011 to 250.0 in 2012, but was above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate at 63.8% was the lowest in the province and well below the national rate of 74.2%. The TB (new pulmonary smear-positive) defaulter rate of 2.6% was

below the national rate of 6.1%. The TB treatment success rate (all TB) was far below provincial and national averages at 64.0%.

The male condom distribution coverage at 15.0 condoms per male 15 years and older was the second lowest in the province, being well below the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 34 910 at the end of 2010/11 to 49 136 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 3 585 to 4 237 in the same period.

#### Annual indicators for district: Umkhanyakude: DC27





## Annual indicators for district: Umkhanyakude: DC27

# **Uthungulu District Municipality**

# Abraham Malaza

The Uthungulu District in KwaZulu-Natal has an estimated medical aid coverage of 12.5%.

The proportion of district health services expenditure on district management was 1.6% and was somewhat lower than the provincial average of 2.1%. The proportion of health expenditure on district hospitals was 46.5%, slightly above the provincial average of 41.9%. The proportion of district health services expenditure on primary health care (PHC) was 52.0% and increased from 44.7% in 2011/12.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) decreased from 82.7% in 2011/12 to 70.3% in 2012/13, and was below the national rate of 76.0%.

The inpatient bed utilisation rate was the lowest in the province at 52.3%. The average length of stay remained stable at 6.8 days and was longer than the national average of 4.2 days. Expenditure per patient day equivalent was R1 791 in 2012/13 compared to R1 558 in 2011/12, and was in line with the national average of R1 823. The ratio of ambulatory to inpatient days was 1.4, which indicates that the number of patients seen at the emergency/OPD units was higher than the number of patients admitted as inpatients. The OPD new client not referred rate was 59.4% and increased from 39.4% in 2011/12, indicating that almost 60% of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate increased from 25.0% in 2011/12 to 27.7% in 2012/13 and was above the national rate of 20.8%. The delivery in facility under 18 years rate decreased slightly from 8.3% to 8.0% and was one of two districts in the province with the lowest rate. The facility maternal mortality ratio decreased from 332.5 per 100 000 live births in 2011/12 to 266.5 per 100 000 live births, but was the third highest ratio in the country in 2012/13. The stillbirth in facility rate increased from 26.4 per 1 000 births in 2011/12 to 28.4 in 2012/13. This was the highest in KZN and higher than the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate, at 12.1 per 1 000 live births, was the highest in the province and was above the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased from 39.6% in 2011/12 to 46.0% in 2012/13, and was the second highest rate in the province. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) at 39.0% was higher than the national prevalence of 29.5%. The antenatal client initiated on ART rate was 80.3% and increased from 73.9% in 2011/12. This was, however, slightly below the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage increased from 99.2% in 2011/12 to 111.9% in 2012/13.<sup>a</sup> The equivalent DHIS indicator, PCR test positive around 6 weeks rate, was 97.6%, which suggests that almost all infants in need are tested. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 1.7% was lower than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) value of 2.1%.

Immunisation coverage under 1 year was 107.8% in 2012/13. However, a coverage value exceeding 100% may be due to poor data quality or an underestimation of the population under one year. The measles 1st to 2nd dose drop-out rate increased from 4.2% in 2011/12 to 9.9% in 2012/13 and was well below the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence decreased from 23.5 per 1 000 children in 2011/12 to 16.7 in 2012/13, but was still higher than the provincial average of 15.4 and the national average 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate declined from 8.7% to 3.0% in the past year and was lower than both the provincial and national averages of 4.3%. The child under 5 years pneumonia incidence decreased from 145.0 per 1 000 children in 2011/12 to 118 per 1 000 children in 2012/13, but was well above the national incidence of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate increased from 3.7% to 5.8% in the same period and was higher than both the provincial (2.6%) and national (3.8%) averages. The child under 5 years severe acute malnutrition incidence also decreased from 5.5 to 5.1 per 1 000 children in the same period and was the third lowest in the province. The child under 5 years severe acute malnutrition case fatality rate increased from 7.2% in 2011/12 to 16.0% in 2012/13, a rate higher than both the provincial (11.0%) and national (12.7%) averages. The vitamin A coverage in children aged 12 to 59 months was 43.1% and increased from 39.6% in 2011/12, and was in line with the national average of 42.8%.

The couple year protection rate increased from 25.1% in 2011/12 to 31.9% in 2012/13, but was still below the national average of 37.8%. The cervical cancer screening coverage also increased from 56.8% to 70.6% in the same period and was well above the national rate of 55.4%.

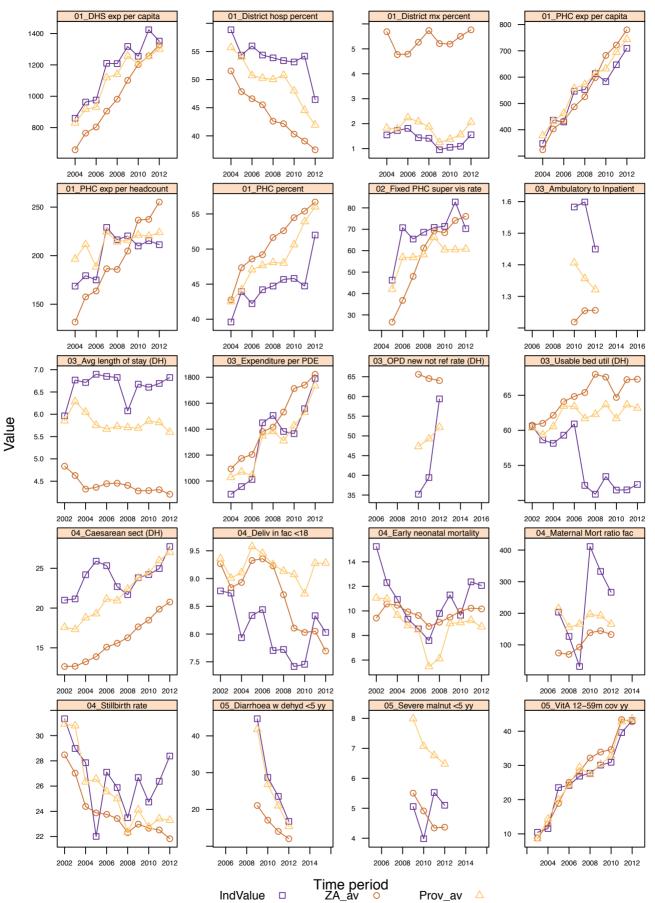
The TB incidence (all cases) was 846.9 per 100 000 people and decreased from 1 153 in 2011. This was above the national average of 687.3 per 100 000 people. The TB case finding index was 2.2% and below the provincial index of 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 967 in 2011 to 2 068 in 2012, and the TB incidence (new pulmonary smear-positive) at 211.1 per 100 000 people was the lowest in KZN and below the national incidence of 235.7. This also indicates that only about one quarter of TB case findings are new pulmonary TB smear-positive.

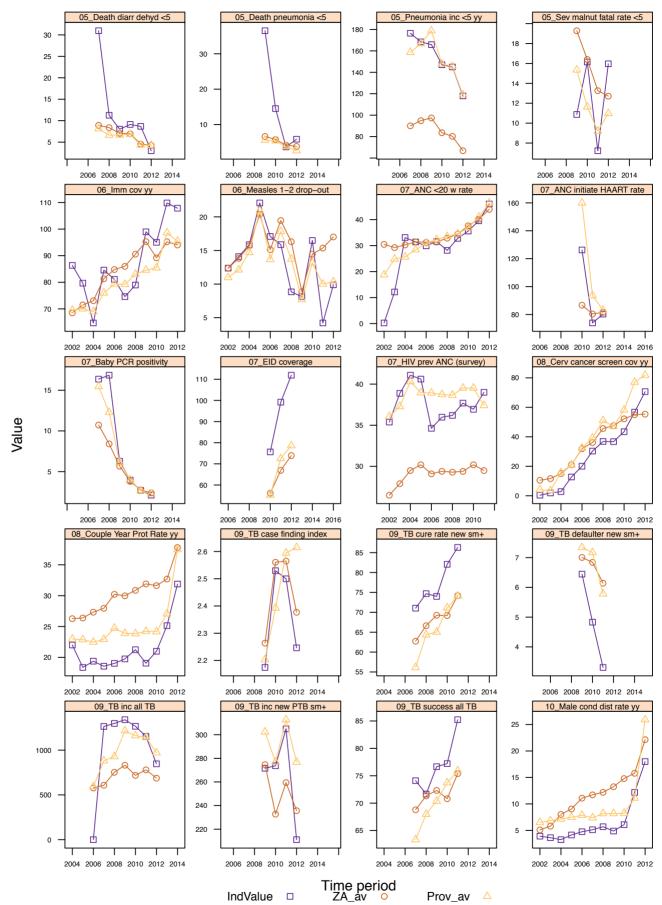
a A value of more than 100% indicates that babies born in other districts were tested for HIV in Uthungulu district, or that the estimation of the number of exposed infants (which is calculated from antenatal HIV prevalence multiplied by live births registered with Stats SA) is too low.

The TB (new pulmonary smear-positive) cure rate at 86.3% was the highest in the province and well above the national rate of 74.2%. The TB (new pulmonary smear-positive) defaulter rate of 3.3% was below the national rate of 6.1%. The TB treatment success rate (all TB) of 85.2% was also the highest rate in KZN.

Male condom distribution coverage increased from 12.2 condoms per male 15 years and older in 2011/12 to 18.0 condoms in 2012/13, but was still below the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 45 973 at the end of 2010/11 to 71 684 by the end of 2012/13, and the total number of children under 15 years remaining on ART at end of the month also increased from 4 355 to 5 765 in the same period.

#### Annual indicators for district: Uthungulu: DC28





## Annual indicators for district: Uthungulu: DC28

## iLembe District Municipality

## Naomi Massyn

iLembe District in KwaZulu-Natal is situated on the eastern coast of the province and has an estimated medical scheme coverage of 7.3%.

At 3.0%, the proportion of district health services expenditure on district management was above the provincial average of 2.1% and below the national average of 5.8%. The proportion of total district expenditure on primary health care (PHC) was the third highest in the province at 63.8%, and was above the provincial average of 56.0% as well as the national average of 56.7%. The percentage expenditure on district hospital services was 33.2% and the third lowest percentage provincially.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 66.7% and below the national average of 76.0%.

The inpatient bed utilisation rate was 63.9% and increased from 59.3% in 2011/12. It was, however, below the national rate of 67.3%. The average length of stay was 6.8 days and was longer than the provincial and the national averages of 5.6 days and 4.2 days respectively. The expenditure per patient day equivalent was R1 836. The ratio of ambulatory to inpatient days was 1.7, which indicates that the number of patients seen at the emergency/OPD units was much higher than the number of patients admitted as inpatients. The OPD new client not referred rate was 81.7%, indicating that a very high percentage of people seen at OPDs are bypassing PHC services.

The delivery by Caesarean section rate was 26.5% and increased from 21.5% in 2011/12, being well above the national rate of 20.8%. The delivery in facility under 18 years rate was 9.3% and above the national rate of 7.7%. The facility maternal mortality ratio decreased from 112.5 per 100 000 live births in 2011/12 to 95.5 per 100 000 live births, and was the third lowest provincially and well below the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate was 21.8 per 1 000 births, and the inpatient early neonatal death rate was 9.3 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 45.3%. According to the 2011 National Antenatal Sero-prevalence Survey, the HIV prevalence among antenatal clients tested was 35.4% and decreased from 42.3% in 2010. The antenatal client initiated on ART rate remained stable at 78.2%. This was, however, below the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 156.1% and well above the national coverage of 73.9%. A rate above 100% might indicate that babies were born in another district but were tested in iLembe, or that the number of exposed infants (which is based on antenatal HIV prevalence multiplied by the number of registered live births) has been underestimated. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.8% was slightly lower than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 3.0%.

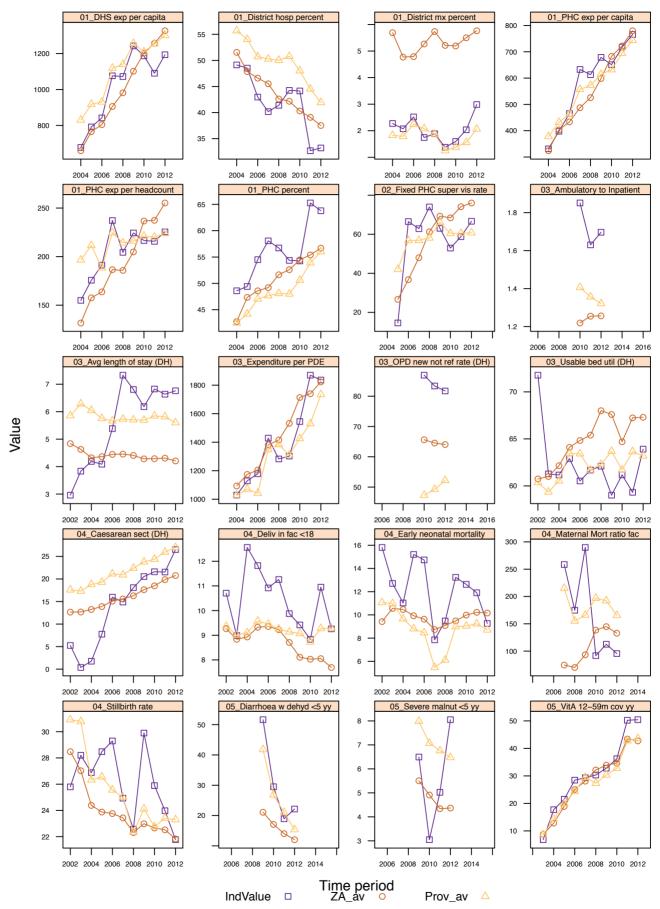
The immunisation coverage under 1 year was 99.2%, and the measles 1st to 2nd dose drop-out rate was 10.6%.

The child under 5 years diarrhoea with dehydration incidence was the highest in the province at 22.2 episodes per 1 000 children, and increased from 18.9 per 1 000 children in 2011/12. The child under 5 years diarrhoea case fatality rate was 5.5% and above the national rate of 4.3%. The child under 5 years pneumonia incidence was 125.7 cases per 1 000 children and decreased from 147.8 in 2011/12. This was, however, well above the national incidence of 66.8. The child under 5 years pneumonia case fatality rate was the lowest in the province at 2.0%. The child under 5 years severe acute malnutrition incidence was 8.1 cases per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate was 8.3% and well below the national rate of 12.7%. The vitamin A coverage 12 to 59 months was 50.4%.

The cervical cancer screening coverage was the third lowest in the province at 69.6%, and the couple year protection rate the second lowest at 31.1%.

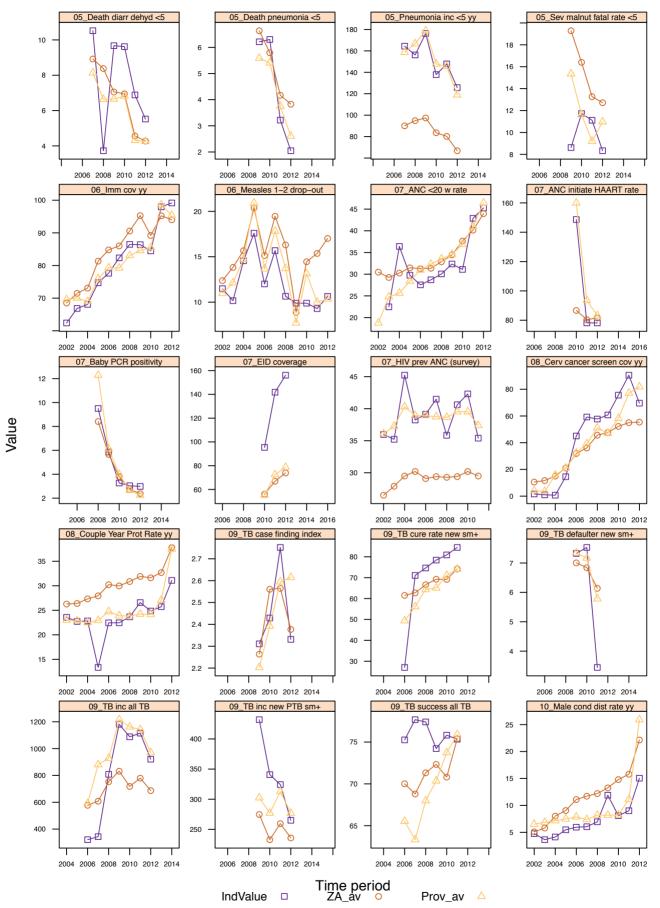
The TB incidence (all cases) was 920.9 per 100 000 people. This decreased from 1 115.3 per 100 000 people in 2011/12 and was well above the national average of 687.3 per 100 000 people. The TB case finding index was 2.3%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 042 in 2011/12 to 1 676 in 2012/13, resulting in a decrease in the TB incidence (new pulmonary smear-positive) from 324.3 per 100 000 people in 2011/2 to 265.0. This was, however, still above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was the second highest in the province at 84.5%. The TB (new pulmonary smear-positive) defaulter rate of 3.4% was below the national rate of 6.1%, and the TB treatment success rate (all TB) was 75.3%.

The male condom distribution coverage at 15.1 condoms per male 15 years and older was the third lowest in the province and was below the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 35 129 at the end of 2011/12 to 39 546 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 2 675 to 2 896 in the same period.



#### Annual indicators for district: iLembe: DC29

#### Annual indicators for district: iLembe: DC29



# Sisonke District Municipality

## Abraham Malaza

Sisonke District is situated in the south of KwaZulu-Natal Province and is bordered by Lesotho to the west, Ugu district to the east, uMgungundlovu District to the north and the Eastern Cape Province to the south. Medical scheme coverage in Sisonke District was estimated to be 6.3%.

The proportion of district health services expenditure on district management was 2.5%, slightly higher than the provincial average of 2.1%. The proportion of health expenditure on district hospitals was 51.2%, above the provincial average of 41.9%. The proportion of district health services expenditure on primary health care (PHC) was 46.3% and decreased from 48.0% in 2012/13.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) increased from 75.5% in 2011/12 to 81.1% in 2012/13, and was well above the provincial average of 60.8%.

The inpatient bed utilisation rate was 60.9% and below the provincial rate of 63.2%. The average length of stay was 5.4 days and longer than the national average of 4.2 days. Expenditure per patient day equivalent was R1 827 in 2012/13 compared to R1 531 in 2011/12 and was in line with the national average of R1 823. The ratio of ambulatory to inpatient days was 1.1, and indicates that the number of patients seen at the emergency/OPD units was almost equal to the number of patients admitted as inpatients. The OPD new client not referred rate was 59.1% and increased from 54.7% in 2011/12. This indicated that more than half of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was 25.2% and above the national rate of 20.8%. The delivery in facility under 18 years rate was 10.8% and also above the national rate of 7.7%. The facility maternal mortality ratio decreased from 127.9 per 100 000 live births in 2011/12 to 92.5 per 100 000 live births. The stillbirth in facility rate at 22.1 per 1 000 births was in line with the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate, at 11.1 per 1 000 live births, was the second highest provincially and above the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased from 37.4% in 2011/12 to 45.6% and was slightly above the national rate of 44.0%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) at 39.9% was more than 10 percentage points higher than the national prevalence of 29.5%. The antenatal client initiated on ART rate was the third lowest provincially at 74.8%, and slightly below the national rate of 81.6%.<sup>a</sup> Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage at 43.6% was the lowest provincially and well below the national coverage of 73.9%. The equivalent DHIS indicator, Baby PCR 6 week uptake, was over 100% for most years, and although the DHIS systematically overestimates coverage of infant PCR testing, this discrepancy does indicate that there are problems either with the data quality<sup>b</sup> or with the estimate of the number of HIV-exposed infants, and that true coverage may be somewhere in between. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 2.2% was in line with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.5%.

Immunisation coverage under 1 year was at 81.8%, but was well below the national average of 94.0%. The measles 1st to 2nd dose drop-out rate decreased from 7.2% in 2011/12 to 6.9% in 2012/13 and was well below the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence at 8.3 per 1 000 children was the third lowest provincially, and was much lower than the provincial average of 15.4 and the national average 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate remained stable at 5.6%. The child under 5 years pneumonia incidence also remained stable at 127.6 cases per 1 000 children, but was well above the national incidence of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate decreased from 5.3% 2011/12 to 2.6% in 2012/13 and was below the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence was 6.6 cases per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate at 17.6% was well above the national rate of 12.7%. The vitamin A coverage in children aged 12 to 59 months was 43.1% and in line with the national average of 42.8%.

The couple year protection rate increased slightly from 25.8% in 2011/12 to 31.7% in 2012/13, but remained below the national average of 37.8%. The cervical cancer screening coverage increased from 61.3% to 78.6% in the same period and was above the national rate of 55.4%.

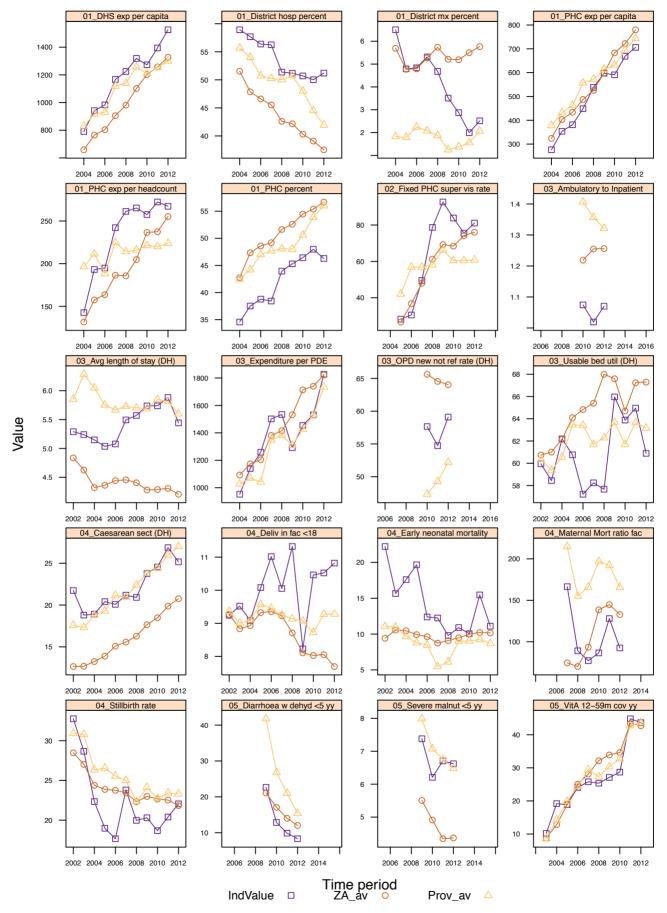
The TB incidence (all cases) was 946.2 per 100 000 people and decreased from 1 071 in 2011. This was above the national average of 687.3 per 100 000 people in 2011. The TB case finding index was 3.7%, the highest in the province. In contrast to most other districts, the number of cases diagnosed with TB (new pulmonary smear-positive) increased in the past year, from 1 016 in 2011 to 1 550 in 2012. The TB incidence (new pulmonary smear-positive) was 302.8 per 100 000 people and above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate remained stable at 70.1% and

a The values over 100% in previous years (154.6% of 2010/11 and 104.2% of 2011/12) are due to substantial underestimates in the denominator – antenatal clients eligible for HAART – and therefore the change does not represent a true decline in ART initiation.

b In this case, the DHIS recorded 3 478 PCR tests in infants at 6 weeks, compared to only 1 887 PCR tests undertaken by NHLS for infants under 2 months in 2012/13.

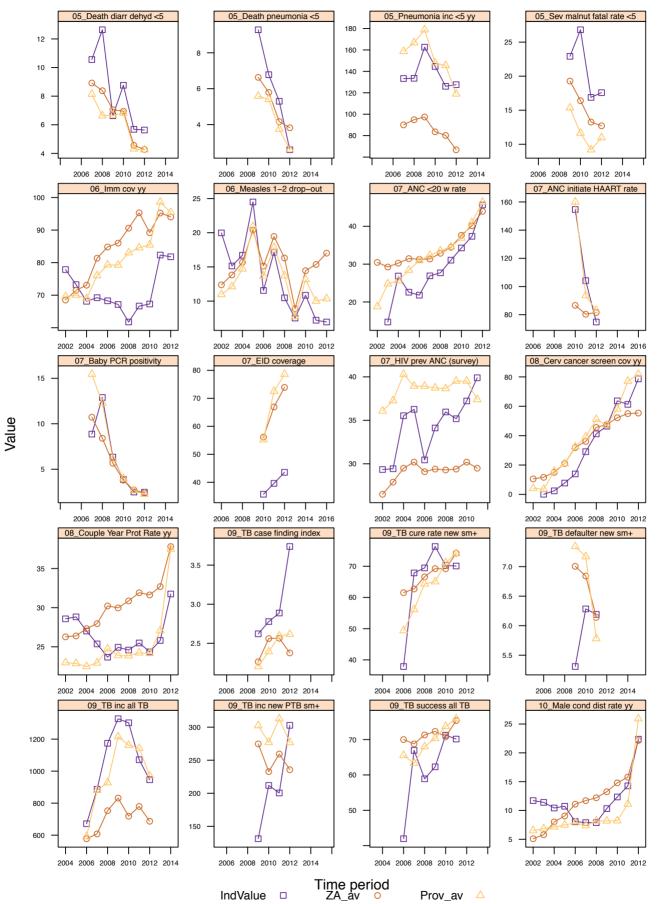
was below the national rate of 74.2%. The TB (new pulmonary smear-positive) defaulter rate of 6.2% was on par with the national rate of 6.1%, and the TB treatment success rate (all TB) was 70.2%.

The male condom distribution coverage increased from 14.3 condoms per male 15 years and older in 2011/12 to 22.4, in line with the national coverage of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 17 792 at the end of 2010/11 to 29 827 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 673 to 2 374 in the same period.



## Annual indicators for district: Sisonke: DC43

#### Annual indicators for district: Sisonke: DC43



# eThekwini Metropolitan Municipality

## Naomi Massyn

The eThekwini Metropolitan Municipality in KwaZulu-Natal Province has an estimated medical scheme coverage of 20.5%, the highest in the province.

At 1.3%, the proportion of district health services expenditure on district management was the third lowest in the province and below the provincial and national averages of 2.1% and 5.8% respectively. The proportion of total district expenditure on primary health care (PHC) was the second highest in the province at 66.5%. This was 10 percentage points above the provincial and national averages. The percentage expenditure on district hospital services was 32.2%, the second lowest provincially.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was the third lowest in the province at 50.3%, and well below the provincial average of 60.8% and the national average of 76.0%.

At 76.5%, the inpatient bed utilisation rate was the highest provincially and above the national (67.3%) rate. The average length of stay was 4.3 days. The expenditure per patient day equivalent at R1 348 was the lowest in the province and well below the national average of R1 823. The ratio of ambulatory to inpatient days declined from 2.2 in 2010/11 to 1.5, which indicates that the number of patients seen at the emergency/OPD units was much higher than the number of patients admitted as inpatients. The OPD new client not referred rate was 51.8%, having improved rapidly from 86.5% in 2010/11. This indicated that more than half of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

At 37.0%, the delivery by Caesarean section rate was the second highest in the province, and above the national rate of 20.8%. The delivery in facility under 18 years rate was 8.0% and just above the national rate of 7.7%. The facility maternal mortality ratio decreased from 251.6 per 100 000 live births in 2011/12 to 174.8 (national ratio was 132.9 per 100 000 live births). The stillbirth in facility rate was 22.9 per 1 000 births, and at 9.6 per 1 000 live births, the inpatient early neonatal death rate increased from 8.8 per 1 000 live births but was below the national rate of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 45.3% and increased from 39.1% in 2011/12. The 2012/13 rate was in line with the provincial rate of 46.4% and higher than the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed that the HIV prevalence among antenatal clients tested was 38.0% and decreased from 41.1% in 2010. At 89.6%, the antenatal client initiated on ART rate was the highest in the province and above the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 68.5% and below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 1.8% was lower than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.1%.

The immunisation coverage under 1 year was 94.7% and in line with the national coverage of 94.0%. The measles 1st to 2nd dose drop-out rate was 10.3% and below the national rate of 17.0%.

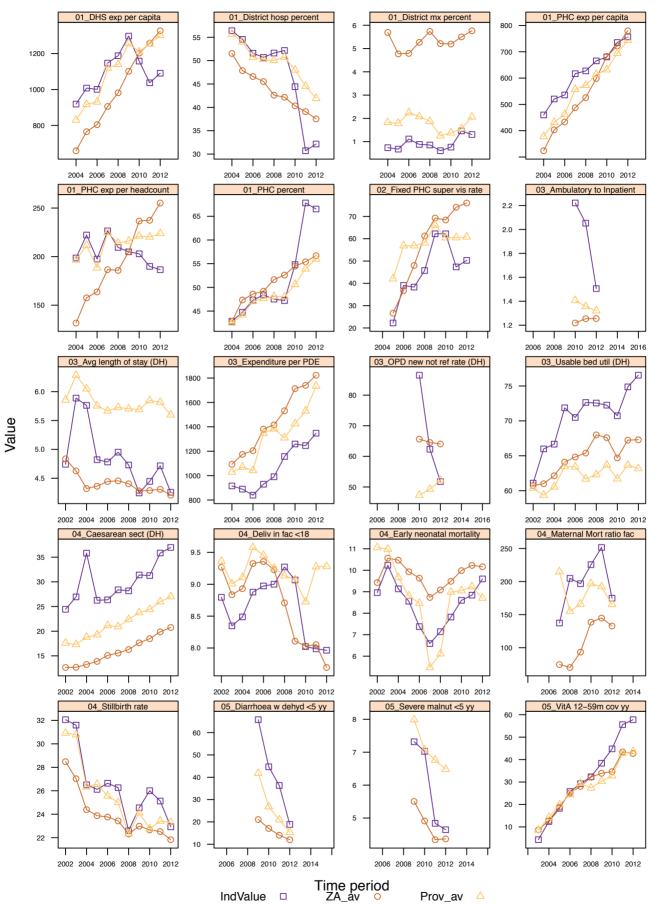
The child under 5 years diarrhoea with dehydration incidence was 18.9 episodes per 1 000 children and decreased from 36.3 per 1 000 children in 2011/12. The child under 5 years diarrhoea case fatality rate was 4.2% and in line with the national rate of 4.3%. The child under 5 years pneumonia incidence was 128.7 cases per 1 000 children and decreased from 178.9 in 2011/12. This was, however, well above the provincial incidence of 119.0. The child under 5 years pneumonia case fatality rate was the lowest in the province at 1.1%. The child under 5 years severe acute malnutrition incidence was 4.6 cases per 1 000 children, whilst the child under 5 years severe acute malnutrition case fatality rate increased from 3.2% in 2011/12 to 4.1% but it was well below the national rate of 12.7%. The vitamin A coverage in children aged 12 to 59 months was 57.8% and the highest rate provincially.

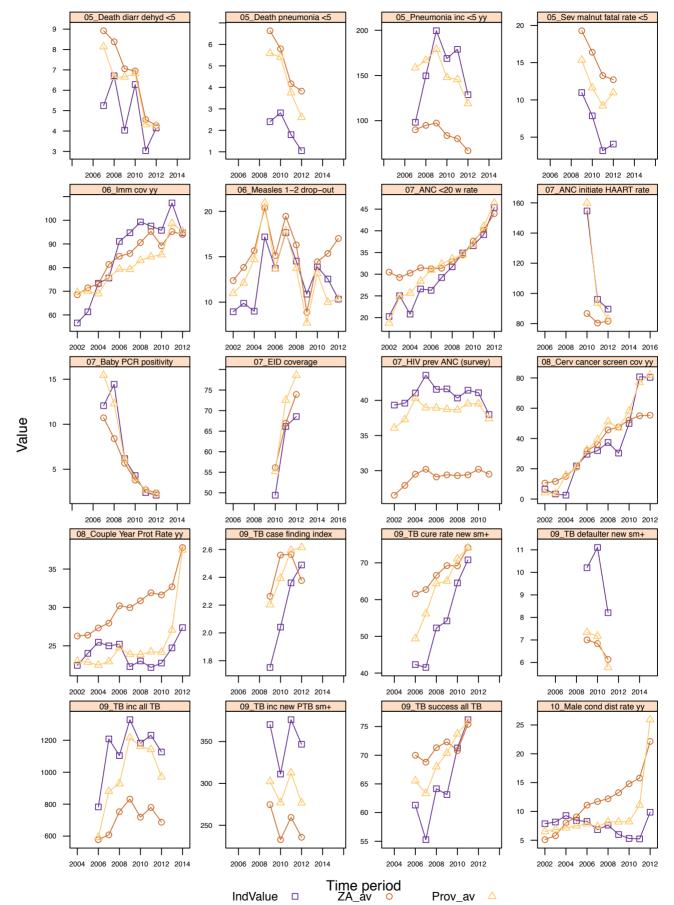
The cervical cancer screening coverage remained stable at 80.4%, and the couple year protection rate was 27.4%, the lowest in the province and below the provincial average of 37.5%.

The TB incidence (all cases) was 1 126.4 per 100 000 people, being the second highest provincially and nationally, and almost double the national average of 687.3 per 100 000 people. The TB case finding index was 2.5% and in line with the provincial index of 2.6%. eThekwini has the highest case load of infectious TB in the country. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 12 928 in 2011/12 to 12 047 in 2012/13; therefore, TB incidence (new pulmonary smear-positive) decreased from 376.1 per 100 000 people in 2011/2 to 346.8. This was, however, still well above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 70.8%, and the TB (new pulmonary smear-positive) defaulter rate was 8.2%. The TB treatment success rate (all TB) was 76.2%.

The male condom distribution coverage, at 9.9 condoms per male 15 years and older, was the lowest in the province, and below the national average of 22.1 condoms. The total number of adults remaining on ART increased from 139 964 at the end of 2011/12 to 207 091 by the end of 2012/13. The total number of children under 15 years remaining on ART also increased from 12 185 to 13 801 over the same period.

#### Annual indicators for district: eThekwini: ETH





## Annual indicators for district: eThekwini: ETH

# 16 Limpopo Province

# **Mopani District Municipality**

Mopani District in Limpopo Province has an estimated medical scheme coverage of 9.4%.

The proportion of total district expenditure on primary health care (PHC) was 44.5%. The proportion of district health services expenditure on district management, at 8.9%, was the highest provincially, and the proportion of total district expenditure on district hospital services of 46.7% was the lowest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) of 89.6% was the second lowest in the province but well above the national average of 76.0%.

The inpatient bed utilisation rate was 70.8%. The average length of stay was 4.0 days, which is shorter than the national average of 4.2 days and the shortest in the province. The average expenditure per patient day equivalent was R1 924, which is slightly higher than the national average of R1 823 and the second lowest in the province. The ratio of ambulatory to inpatient days was 1.7. This indicates that many more patients are seen at the emergency and OPD units than are being admitted as inpatients. The OPD new client not referred rate of 82.9% was the second highest provincially, and showed that a very high percentage of patients bypass PHC facilities and access district hospitals directly.

Delivery by Caesarean section rate in district hospitals was 17.5%. The delivery in facility under 18 years rate was 8.0%. The facility maternal mortality ratio was 134.8 per 100 000 live births, the lowest in the province and in line with the national average of 132.9 per 100 000 live births. The stillbirth in facility rate at 21.1 per 1 000 births was the second highest in the province, and the inpatient early neonatal death rate was 11.1 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate increased from 40.8% in 2011/12 to 46.4% in 2012/13, the highest in the province. The 2011 National Antenatal Sero-prevalence Survey showed the HIV prevalence among antenatal clients tested rate was 25.2%. The antenatal client initiated on ART rate was 54.0%, the lowest in the province and well below the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage of 58.6% was well below the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data), at 2.8%, was in line with the 2.6% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

With regard to the children's immunisation coverage, some of the immunisation indicators have percentages of more than 100%, suggesting poor data quality or incorrect catchment population figures. The immunisation coverage under 1 year increased from 106.1% in 2011/12 to 108.3% in 2012/13. The measles 1st to 2nd dose drop-out rate was 14.5%.

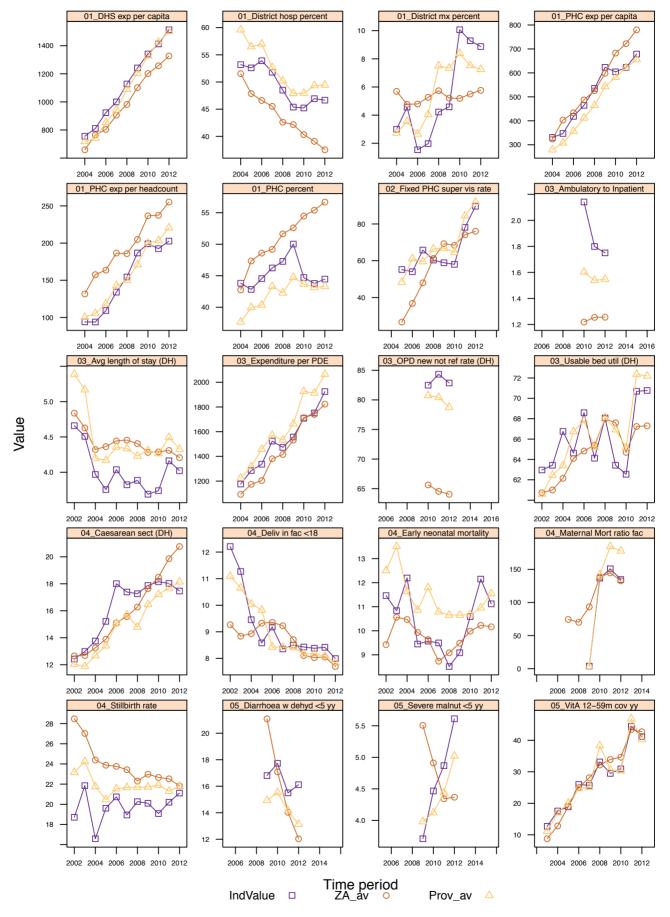
The child under 5 years diarrhoea with dehydration incidence was 16.1 episodes per 1 000 children – the highest incidence in the province. The child under 5 years diarrhoea case fatality rate was 10.2% and more than double the national rate of 4.3%. The child under 5 years pneumonia incidence was 40.4 cases per 1 000 children, and the child under 5 years pneumonia case fatality rate was 5.8%. The child under 5 years severe acute malnutrition incidence was 5.6 cases per 1 000 children, and the child under 5 years severe acute malnutrition case fatality of 21.1% was the second highest in the province and the sixth highest nationally. Vitamin A coverage for children aged 12 to 59 months was 41.2%.

The couple year protection rate increased from 44.0% in 2011/12 to 45.6% in 2012/13 and was the highest provincially. There was also an increase in the cervical cancer screening coverage from 57.1% to 66.6% in the same period, the highest coverage in the province.

The TB incidence (all cases) in Mopani District was 407.5 per 100 000 people and lower than the national incidence of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 993 in 2011 to 1 757. TB incidence (new pulmonary smear-positive) was the second highest provincially at 161.4 per 100 000 people, but much lower than the national incidence of 235.7. The TB case finding index was 1.5%, the lowest in the province and lower than the national index of 2.4%. The TB cure rate (new pulmonary smear-positive) was 76.2% in 2011, higher than the national average of 74.2%, whilst the TB (new pulmonary smear-positive) defaulter rate was 4.1%. The TB new client treatment success rate (all TB) was 71.5%, the highest provincially.

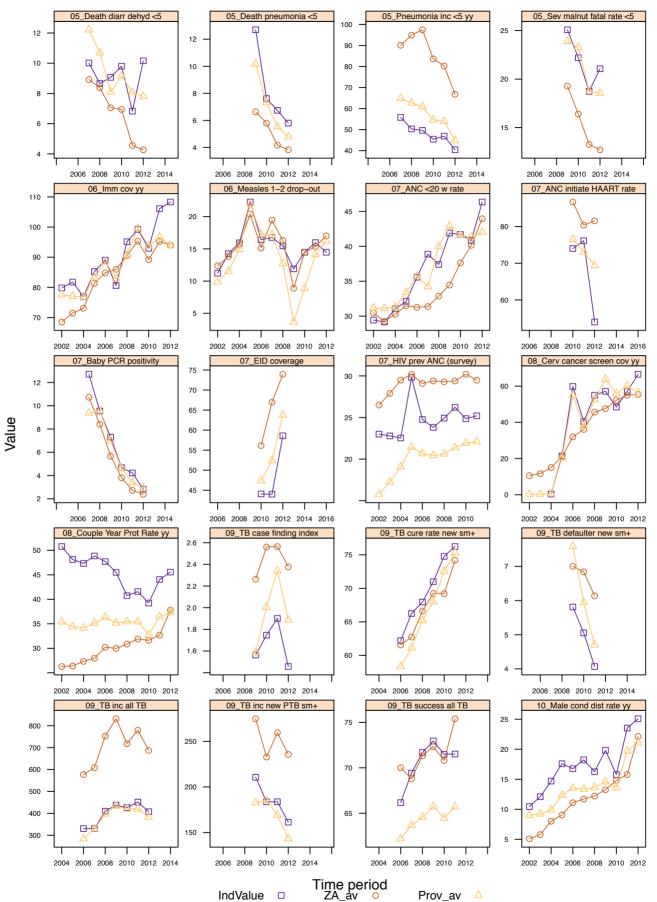
The male condom distribution coverage increased from 23.5 condoms per male 15 years and older in 2011/12 to 25.1 condoms per male in 2012/13, the highest in the province. The total number of adults remaining on ART at the end of the month increased from 18 100 at the end of 2011/12 to 29 825 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 588 to 2 278 in the same period.

# **Chantelle Liebenberg**



## Annual indicators for district: Mopani: DC33

## Annual indicators for district: Mopani: DC33



# **Vhembe District Municipality**

## **Chantelle Liebenberg**

Vhembe District in Limpopo Province has an estimated medical scheme coverage of 7.2%.

The proportion of total district health services expenditure on primary health care (PHC) was 44.0%, with 7.2% spent on district management, and 48.8% spent on the district hospital services.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) of 96.3% was the highest in the province and the fifth highest in the country.

The inpatient bed utilisation rate was 78.5%, which was the highest for the province. The average length of stay of 4.6 days was the longest in the province and longer than the national average of 4.2 days. Expenditure per patient day equivalent was R1 905, the lowest in the province. The OPD new client not referred rate was 70.8% indicating that a high proportion of clients are bypassing PHC facilities and accessing district hospitals directly. The ratio of ambulatory patients to inpatients is 1.3, meaning that more clients are seen at the emergency unit/OPD clinics than are admitted to hospital.

The delivery by Caesarean section rate in district hospitals was 17.3%, the lowest rate in the province. The delivery in facilities in women under 18 years rate was 8.3%, the highest provincially. The facility maternal mortality ratio was 146.3 per 100 000 live births. The stillbirth in facility rate, at 16.7 per 1 000 births, was the lowest in the province, and the inpatient early neonatal death rate was also the lowest provincially, at 8.8 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate decreased slightly from 39.5% in 2011/12 to 37.9% in 2012/13, and has dropped from being the highest to the lowest in the province. The 2011 National Antenatal Sero-prevalence Survey showed that the HIV prevalence among antenatal clients tested was 14.6%, and the lowest in the province. The antenatal client initiated on ART rate was 68.9%. Early infant HIV diagnosis coverage (NHLS data) was 75.1%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) of 3.5% was higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.7%.

The immunisation coverage under 1 year decreased from 100.4% in 2011/12 to 96.9% in 2012/13 and was the second highest in the province. The measles 1st to 2nd dose drop-out rate was 14.7%.

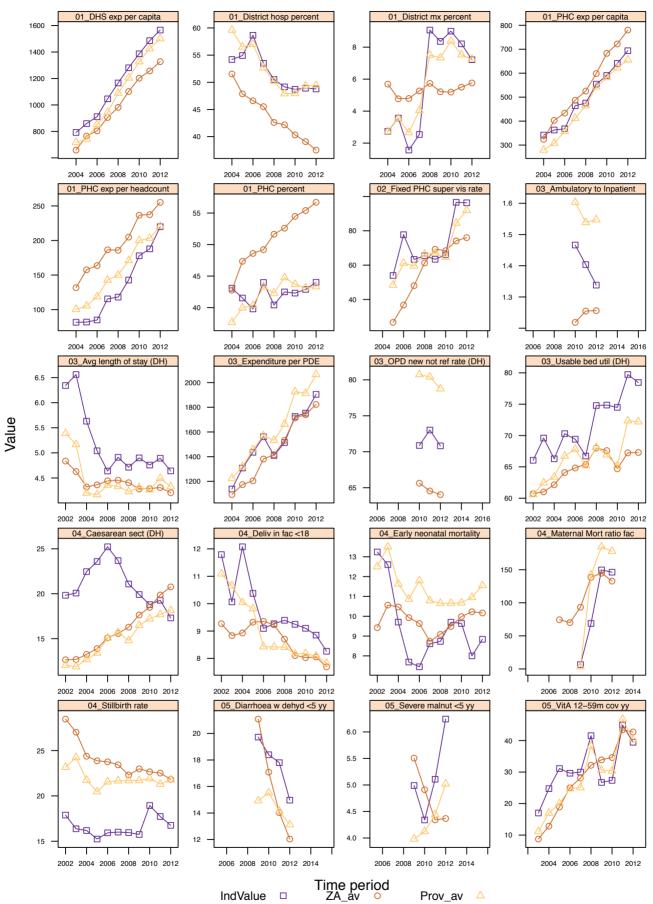
The child under 5 years diarrhoea with dehydration incidence was 15.0 episodes per 1 000 children, and the child under 5 years diarrhoea case fatality rate was 6.1%. The child under 5 years pneumonia incidence was 57.2 cases per 1 000 children, being the highest in the province, and the child under 5 years pneumonia case fatality rate was 4.1%. The child under 5 years severe acute malnutrition incidence was 6.2 cases per 1 000 children, also the highest in the province. The child under 5 years severe acute malnutrition case fatality rate was 18.0% and in line with the provincial average of 18.5%. Vitamin A coverage in children aged 12 to 59 months was 39.5%.

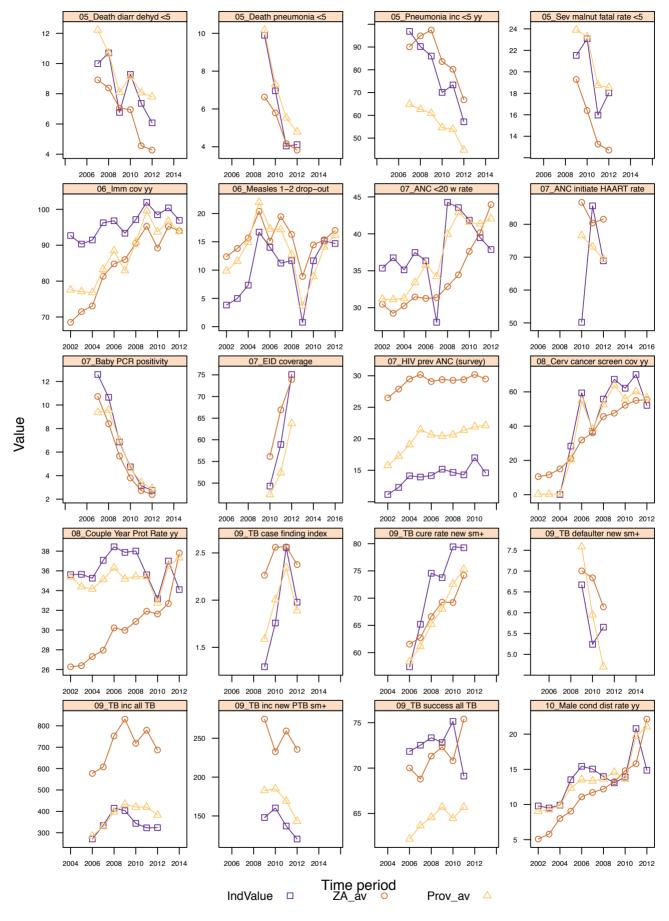
The couple year protection rate decreased from 37.0% in 2011/12 to 34.1% in 2012/13. There was also a large decrease in the cervical cancer screening coverage, from 70.1% to 52.1%, in the same period.

The TB incidence (all cases) was 324.0 per 100 000 people. This was well below the national incidence of 687.3 per 100 000 people. The TB case finding index was 2.0%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 784 in 2011/12 to 1 579 in 2012/13. TB incidence (new pulmonary smear-positive) was 120.3 per 100 000 people. This was the second lowest provincially and well below the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) of 79.3% was the highest in the province. The TB defaulter rate (new pulmonary smear-positive) was 5.7%, below the national rate of 6.1%, and the TB treatment success rate (all TB) was 69.1%.

The male condom distribution coverage decreased from 20.8 condoms per male 15 years and older in 2011/12 to 14.9 condoms in 2012/13, the lowest in the province. The total number of number of adults remaining on ART at the end of the month was 31 994 by the end of 2012/13, while the total number of number of children under the age of 15 years remaining on ART at the end of the month by the end of 2012/13 was 2 130.

## Annual indicators for district: Vhembe: DC34





## Annual indicators for district: Vhembe: DC34

# **Capricorn District Municipality**

# **Chantelle Liebenberg**

Capricorn District in Limpopo Province has the lowest medical scheme coverage in the province, estimated at 6.6%.

The proportion of total district expenditure on primary health care (PHC) was 45.1%, while 6.6% was spent on district management. The proportion of total district expenditure on district hospital services was 48.2%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) rate was 87.7%, the lowest in the province but above the national average of 76.0%.

The inpatient bed utilisation rate was 69.4%. The average length of stay of 4.5 days was the second longest provincially and slightly longer than the national average of 4.2 days. The expenditure per patient day equivalent (PDE) was R2 148 – the second highest in the province and higher than the national PDE expenditure of R1 823. The ratio of ambulatory to inpatient days was 1.6, indicating that many more patients are seen at the emergency and OPD units than are being admitted as inpatients. The OPD new client not referred rate of 61.2% was the lowest provincially and has declined markedly from 81.4%, but still showed that a large percentage of patients bypass PHC facilities and access the district hospitals directly.

Delivery by Caesarean section rate was 17.3%, the lowest in the province. The delivery in facility under 18 years rate was 7.3%, also the lowest provincially. The facility maternal mortality ratio was 292.2 per 100 000 live births, which was much higher than the national average of 132.9 per 100 000 live births and the highest in the country. The stillbirth in facility rate at 26.3 per 1 000 births was the highest in the province, and the inpatient early neonatal death rate was also the highest provincially, at 17.5 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate decreased slightly from 41.0% in 2011/12 to 39.3% in 2012/13. The 2011 National Antenatal Sero-prevalence Survey showed an HIV prevalence among antenatal clients tested of 25.3%. The antenatal client initiated on ART rate, at 79%, was the highest provincially but below the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 52.8%, the lowest rate in the province and considerably lower than the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.9% was much higher than the 2.1% value of the PCR test positive around 6 weeks rate (DHIS data).

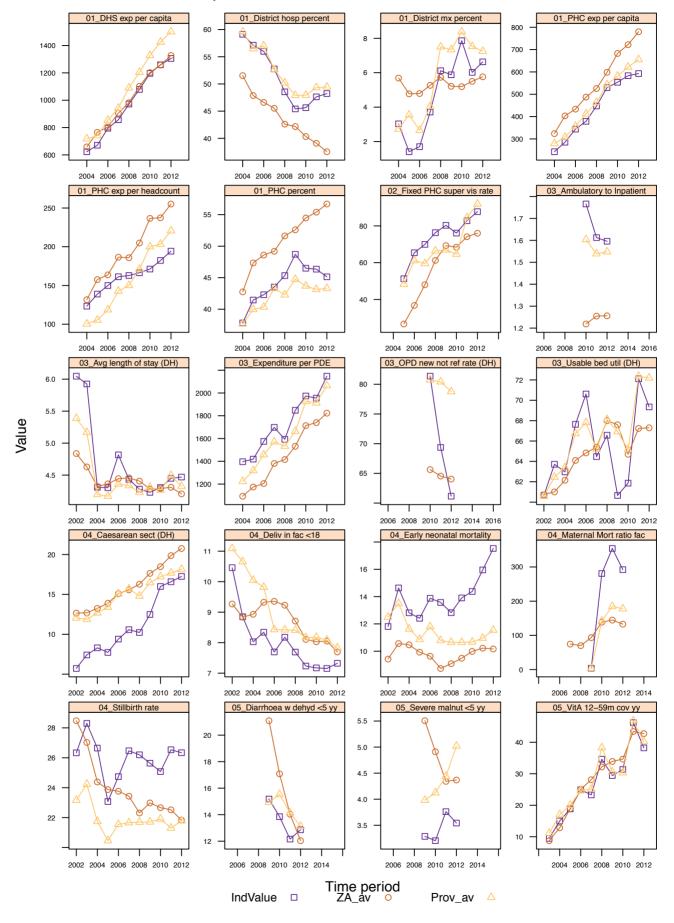
The immunisation coverage under 1 year decreased from 98.0% in 2011/12 to 91.5% in 2012/13. The measles 1st to 2nd dose drop-out rate was 14.3%, the lowest in the province and lower than the national average of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was 12.9 episodes per 1 000 children, while the child under 5 years diarrhoea case fatality rate was 9.3%, more than double the national rate of 4.3%. The child under 5 years pneumonia incidence was 49.8 cases per 1 000 children, and the child under 5 years pneumonia case fatality rate was 4.8%. The child under 5 years severe acute malnutrition incidence at 3.5 cases per 1 000 children was the lowest in the province, and the child under 5 years severe acute malnutrition case fatality rate of 22.0% was the highest in the province and the fourth highest nationally. Vitamin A coverage for children aged 12 to 59 months was 38.2%, the lowest in the province and below the national coverage of 42.8%.

The couple year protection rate increased from 28.8% in 2011/12 to 33.3% in 2012/13, but it was still the lowest in the province. There was a decrease in the cervical cancer screening coverage from 55.6% to 52.1% in the same period, also the lowest provincially.

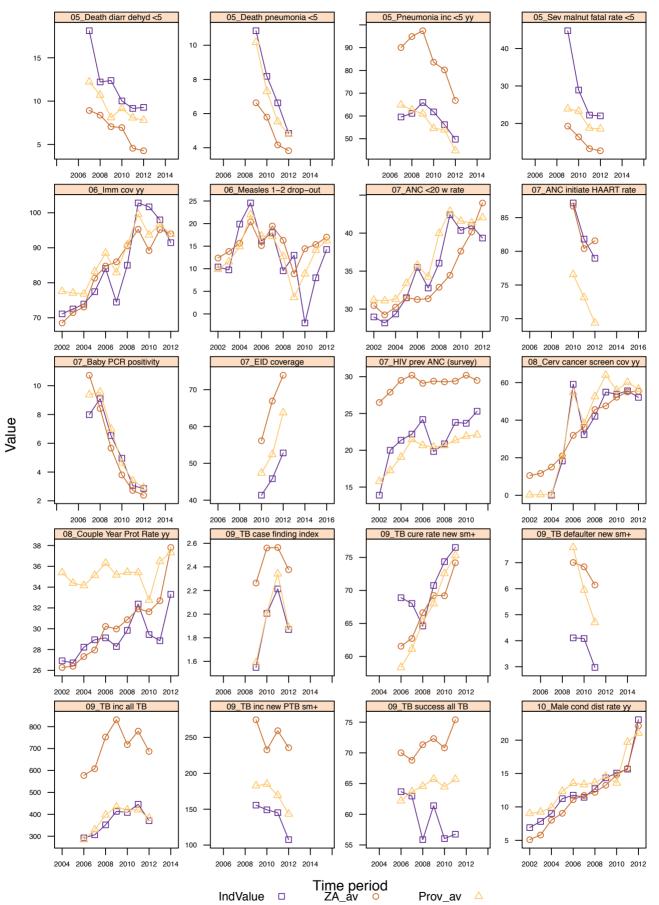
The TB incidence (all cases) in Capricorn District was 370.7 per 100 000 people and lower than the national incidence of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 748 in 2011 to 1 297. TB incidence (new pulmonary smear-positive) was the lowest provincially at 107.5 per 100 000 people, and much lower than the national incidence of 235.7. The TB case finding index was 1.9%, lower than the national index of 2.4%. The TB cure rate (new pulmonary smear-positive) was 76.5% in 2011, higher than the national average of 74.2%. The TB defaulter rate (new pulmonary smear-positive) at 3.0% in the same period was the lowest in the province, and the TB treatment success rate (all TB) was 56.8%, the lowest provincially. The poor treatment outcomes for all cases overall was due primarily to high mortality (14.6% of the cohort died) and 21.8% of patients being recorded as 'transferred out'.

The male condom distribution coverage increased from 15.7 condoms per male 15 years and older in 2011/12 to 23.1 in 2012/13, and is in line with the national coverage of 22.1 condoms. The total number of adults remaining on ART at the end of the month increased from 12 604 at the end of 2010/11 to 32 944 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased, from 1 148 to 2 013, in the same period.



### Annual indicators for district: Capricorn: DC35

### Annual indicators for district: Capricorn: DC35



# Waterberg District Municipality

## Anne Ochieng and Joseph Rasethe

Waterberg District Municipality is located in the south-western part of Limpopo Province, bordering Botswana and the North West, Gauteng and Mpumalanga provinces. The medical scheme coverage in Waterberg District Municipality was estimated to be 16.7%, roughly double the provincial coverage.

Waterberg District spent 57.1% of the district health services budget for 2012/13 on district hospitals, the second highest expenditure nationally and the highest in the province. In contrast, the district's expenditure on primary health care (PHC) services at 35.5% was the second lowest nationally and lower than the provincial average expenditure on PHC services of 43.3%. The proportion of district health services expenditure on district management for the year 2012/13 was 7.4%, the second highest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) increased to 90.7% from 63.9% in 2011/12, exceeding the national average of 76.0%.

The district has the lowest provincial inpatient bed utilisation rate of 64.8%, slightly lower than the national average of 67.3%. The average length of stay of 4.2 days for 2012/13 was equivalent to the national average. The average expenditure per patient day equivalent of R2 346 was the highest in the province and the fourth highest nationally. The ratio of ambulatory to inpatient days at 1.7 was the second highest in the province and higher than the national average of 1.3. This indicates that more patients are seen at the emergency and OPD units than are being admitted as inpatients. The OPD new client not referred rate of 92.8% was the highest provincially and second highest nationally. This rate has varied between 94.8% and 92.8% over the past three years, showing that almost all patients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate was 21.5%, the highest in the province and slightly above the national rate of 20.8%. The delivery in facility under 18 years rate was 7.3%. The facility maternal mortality ratio was 156.6 per 100 000 live births, which was much higher than the national average of 132.9 per 100 000 live births. The stillbirth in facility rate was 22.5 per 1 000 births, and the inpatient early neonatal death rate 10.1 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 45.2%, in line with the national average at 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed an HIV prevalence among antenatal clients tested of 30.3%, the highest provincially. The antenatal client initiated on ART rate was 70.5% and below the national rate of 81.6%. Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 59.1%, considerably lower than the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 3.2% was much higher than the 2.4% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year for 2012/13 at 87.1% was the second lowest in the province and lower than the national average of 94.0%. The measles 1st to 2nd dose drop-out rate was 20.5%, the highest in the province and higher than the national average of 17.0%.

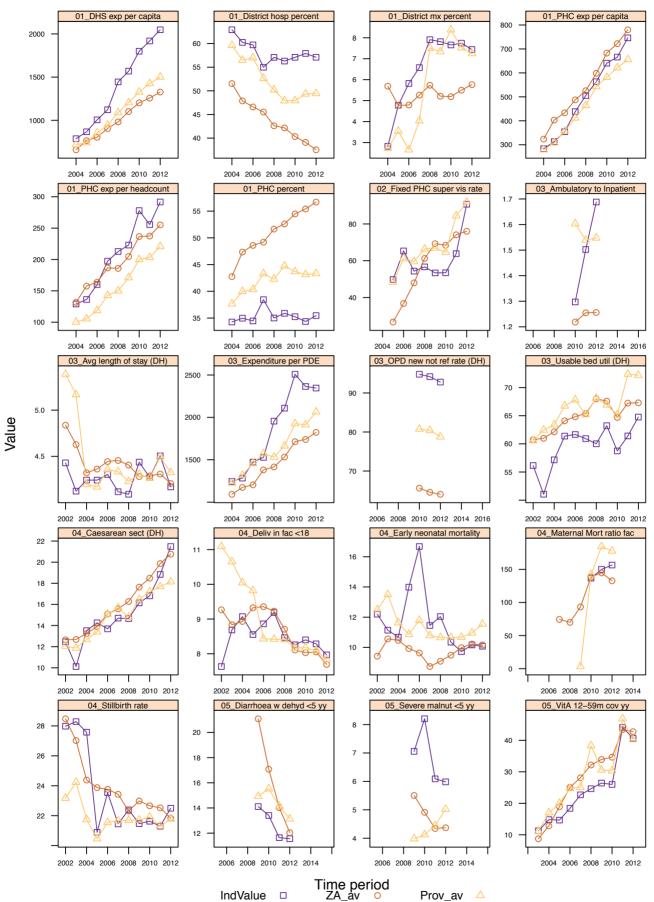
The child under 5 years diarrhoea with dehydration incidence was 11.6 episodes per 1 000 children, and the Waterberg District had the highest child under 5 years diarrhoea case fatality rate in the province of 11.4%, this being the third highest rate nationally. The child under 5 years pneumonia incidence of 33.0 cases per 1 000 children was the lowest in the province and much lower than the national average of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate of 6.1% was higher than the national average of 3.8%. The child under 5 years severe acute malnutrition incidence of 6.0 cases per 1 000 children was higher than the national average of 4.4 per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate of 17.7% was higher than the national average of 12.5%. Vitamin A coverage in children aged 12 to 59 months was 40.6%.

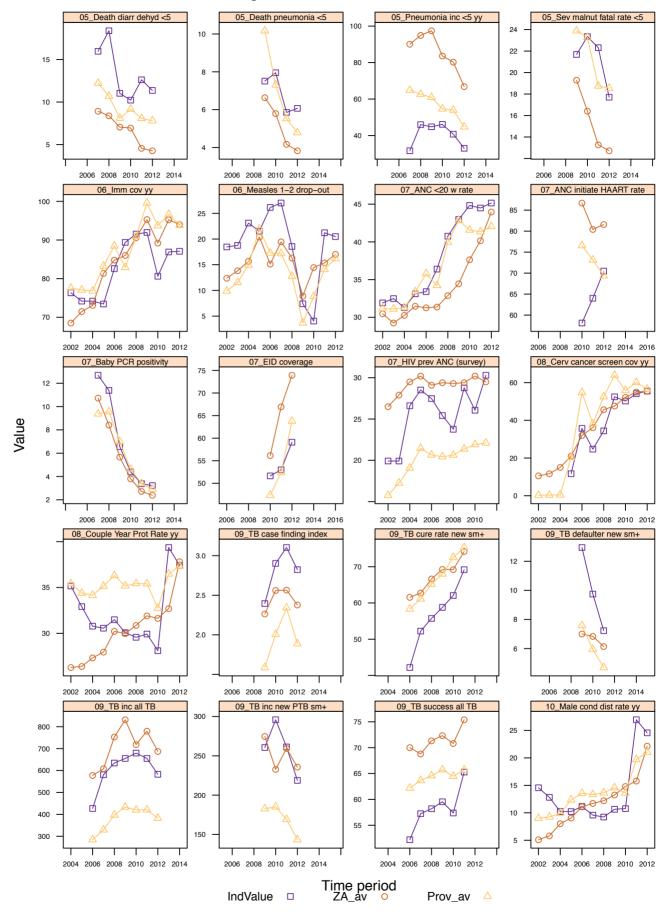
The couple year protection rate in the district was 37.4%, and the cervical cancer screening coverage 55.5%.

TB incidence is clearly higher in Waterberg than in the other districts in Limpopo, and treatment outcomes are, in general, poorer. The TB incidence (all cases) in Waterberg District was 582.7 per 100 000 people in 2012, the highest in the province but lower than the national incidence of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 758 in 2011 to 1 482. TB incidence (new pulmonary smear-positive) was also the highest provincially at 218.7 per 100 000 people, but lower than the national incidence of 235.7. The TB case finding index was 2.8%, also the highest provincially. The TB (new pulmonary smear-positive) cure rate in 2011 was the lowest in the province at 69.2% and lower than the national average of 74.2%. The TB (new pulmonary smear-positive) defaulter rate at 7.2% in the same period was the highest in the province, and the TB treatment success rate (all TB) was 65.3%.

Male condom distribution coverage was 24.6 condoms per male 15 years and older. The total number of adults remaining on ART at the end of the month increased from 11 689 at the end of 2010/11 to 23 441 by the end of 2012/13. The total number of children under 15 years remaining on ART at the end of the month increased from 815 to 1 550 over the same period.

### Annual indicators for district: Waterberg: DC36





### Annual indicators for district: Waterberg: DC36

# **Greater Sekhukhune District Municipality**

# **Chantelle Liebenberg**

The Greater Sekhukhune District in Limpopo Province has an estimated medical scheme coverage of 7.1%.

The proportion of total district expenditure on primary health care (PHC) was 46.0%, while 5.9% was spent on district management. The proportion of total district expenditure on district hospital services was 48.1%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) of 94.3% is the second highest in the province and well above the national average of 76.0%.

The inpatient bed utilisation rate was 75.0%, the second highest provincially. The average length of stay of 4.2 days was the same as the national average. The expenditure per patient day equivalent was R2 147, which was higher than the national average of R1 823. The ratio of ambulatory to inpatient days was 1.5, which indicates that more patients are seen at the emergency and OPD units than are being admitted as inpatients. The OPD new client not referred rate of 81.2% shows that a high percentage of patients bypass PHC facilities and access district hospitals directly.

The delivery by Caesarean section rate in district hospitals was 18.8%, the second highest rate in the province, and the delivery in facility under 18 years rate was 7.6%. The facility maternal mortality ratio recorded by the DHIS was 151.5 per 100 000 live births. The stillbirth in facility rate was 23.6 per 1 000 births, and the inpatient early neonatal death rate was 9.8 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate remained stable at 42.8%. The 2011 National Antenatal Sero-prevalence Survey showed the HIV prevalence among antenatal clients tested was 18.9%. The antenatal clients initiated on ART rate was 75.7%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage expanded rapidly to 92.8%, the highest coverage in the province. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 3.0% was higher than the 2.0% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

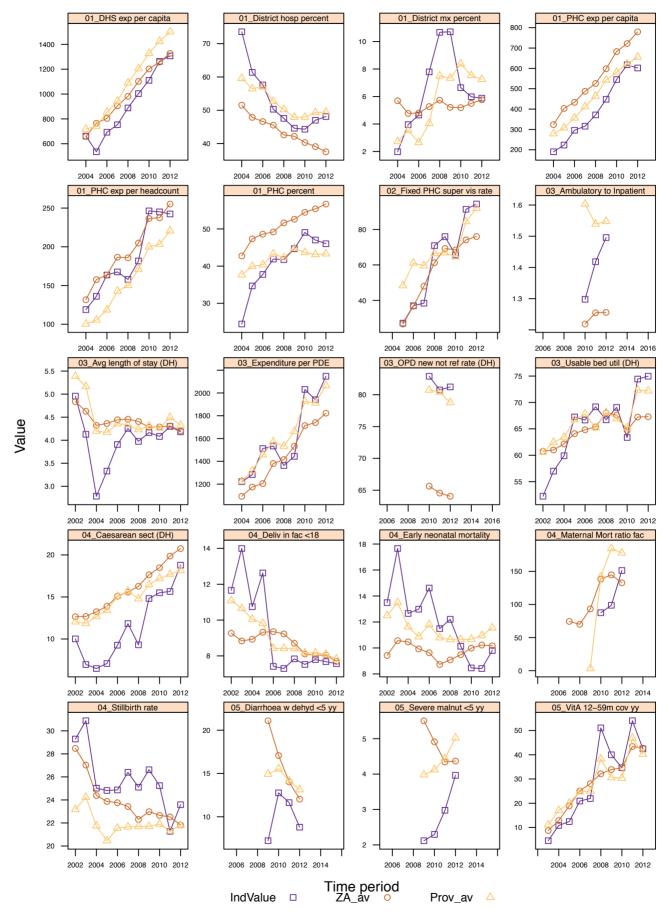
The immunisation coverage under 1 year decreased from 85.6% in 2011/12 to 81.0% in 2012/13, and was the lowest coverage in the province. The measles 1st to 2nd dose drop-out rate was 19.7%.

The child under 5 years diarrhoea with dehydration incidence was 8.8 episodes per 1 000 children, the lowest in the province. The child under 5 years diarrhoea case fatality rate was 5.0%, also the lowest provincially. The child under 5 years pneumonia incidence was 33.1 cases per 1 000 children, and the child under 5 years pneumonia case fatality of 3.9% was the second lowest incidence and lowest case facility rate in the province respectively. The child under 5 years severe acute malnutrition incidence was 4.0 cases per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate was 13.7%, both being the lowest in the province. Vitamin A coverage for children aged 12 to 59 months was 42.5%, the highest provincially.

The couple year protection rate increased from 34.3% in 2011/12 to 37.2% in 2012/13. There was, however, a decrease in the cervical cancer screening coverage, from 61.1% to 57.0% in the same period.

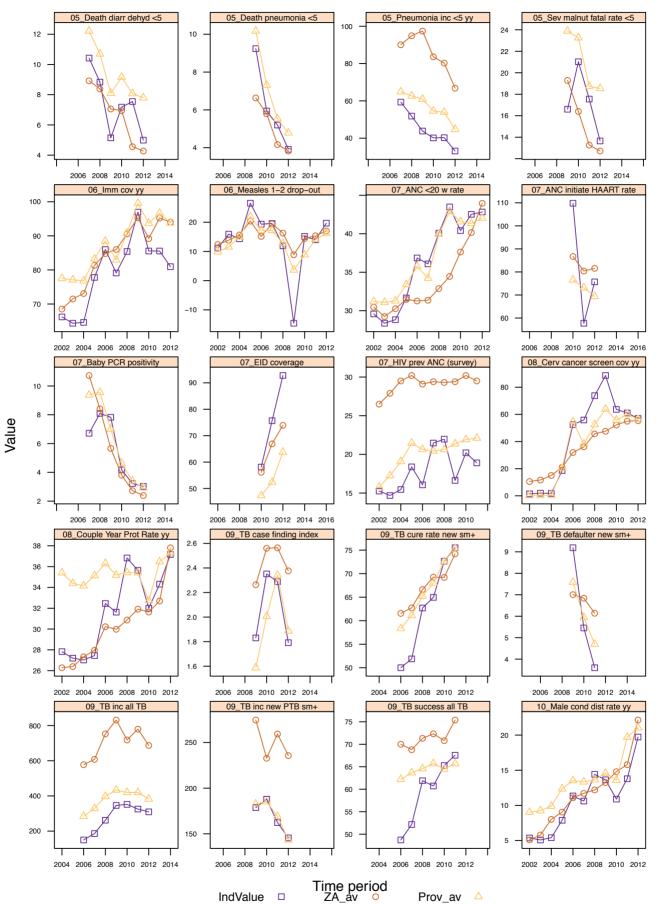
The TB incidence (all cases) in Greater Sekhukune District was 309.3 per 100 000 people, the lowest provincially and lower than the national incidence of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 620 in 2011 to 1 452. TB incidence (new pulmonary smear-positive) was 145.5 per 100 000 people, ranking lower than the national incidence of 235.7. The TB case finding index was 1.8%, lower than the national index of 2.4%. The TB cure rate (new pulmonary smear-positive) was 75.5% in 2011, and the TB (new pulmonary smear-positive) defaulter rate was 3.6%. The TB treatment success rate (all TB) was 67.6%.

The male condom distribution coverage increased from 13.8 condoms per male 15 years and older in 2011/12, to 19.7 condoms per male in 2012/13. The total number of adults remaining on ART at the end of the month increased from 9 556 at the end of 2010/11 to 23 226 by the end of 2012/13, and the total number of children under 15 years remaining on ART at end of the month also increased, from 667 to 1 805 in the same period.



#### Annual indicators for district: Greater Sekhukhune: DC47

### Annual indicators for district: Greater Sekhukhune: DC47



# 17 Mpumalanga Province

## **Gert Sibande District Municipality**

# Fiorenza Monticelli

Gert Sibande District is a National Health Insurance (NHI) pilot district and one of the three districts in Mpumalanga Province. It is situated in the southern part of the province, bordering on Swaziland in the east, Free State and KwaZulu-Natal provinces in the south, and Gauteng Province in the west. The district has an estimated medical scheme coverage of 16.1%, the highest in the Mpumalanga.

As with all Mpumalanga's districts, the percentage expenditure on district hospitals in Gert Sibande has decreased significantly since 2004/05, from 100.0% to 52.8% in 2012/13. Conversely, the proportion spent on district management has escalated from no spend in 2004/05 to 7.2%, and the proportion spent on primary health care (PHC) from no spend to 39.9% in the same period. The expenditure on district management in 2012/13 was above the national average of 3.4%, whilst the spending on PHC was lower than the national average of 56.7%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) has decreased from 86.3% in 2011/12 to 81.4% in 2012/13, and was the highest in the province and well above the national average of 76.0%.

Although Gert Sibande District's inpatient bed utilisation rate was the lowest in the province, it increased from 65.8% in 2011/12 to 69.3% in 2012/13 and was above the national average of 67.3%. The average length of stay was 4.1 days and in line with the national average of 4.2 days. The expenditure per patient day equivalent in 2012/13 was R1 561, and was the lowest spend in the province and the third lowest among the NHI districts. The ratio of ambulatory to inpatient days was 1.9, above the national average of 1.3 and the provincial average of 1.7, and the third highest among the NHI districts. This indicates that many more patients were seen in the emergency/OPD units than were admitted as inpatients. The OPD new client not referred rate at 74.2% decreased from 93.6% in 2010/11, but was still above both the national (64.1%) and provincial (67.6%) averages. This indicates that a very high percentage of patients bypass the PHC facilities and access the district hospitals directly.

In 2012/13, the delivery by Caesarean section rate in district hospitals was 19.7%, slightly below the national average of 20.8%. The delivery in facility under 18 years rate has remained stable at 10.2%, being above the national average of 7.7%, the second highest among the NHI districts, and the highest in the province. The in facility maternal mortality ratio increased from 76.4 per 100 000 live births in 2011/12 to 187.6 in 2012/13, well above the national average of 132.9 per 100 000 live births in that year, and the third highest ratio among the NHI districts. The stillbirth in facility rate increased slightly from 23.1 per 1 000 births in 2011/12 to 25.2 per 1 000 births in 2012/13, and was above the national average of 21.8. The inpatient early neonatal death rate was 10.3 per 1 000 live births in 2012/13, and was on par with the national average of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 38.3% in 2012/13 and was the lowest in the province, the seventh lowest in the country and the third lowest among the NHI districts. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) was the highest among all districts at 46.1%.<sup>a</sup> The antenatal client initiated on ART rate of 73.6% was the lowest in the province and the third lowest among the NHI districts. In 2012/13, data from the National Health Laboratory Services (NHLS) showed the early infant HIV diagnosis coverage was 72.6%, close to the national average of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was 2.5%, in line with the 2.8% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year was 81.7%, and was the lowest in the province and below the national average of 94.0%. The measles 1st to 2nd dose drop-out rate was 15.3%, marginally lower than the national average of 17.0% and the provincial average of 17.8%.

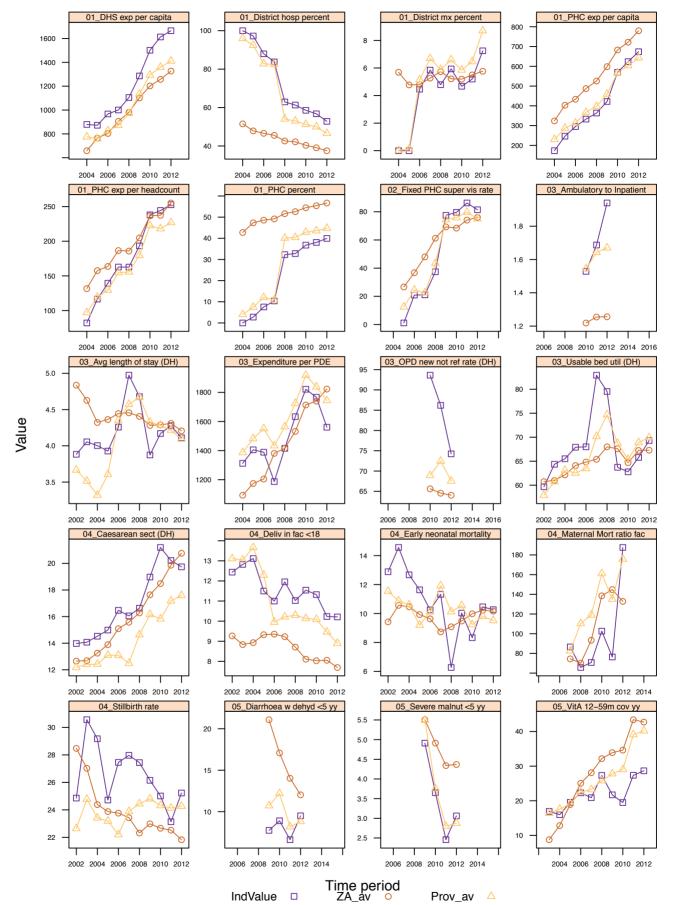
The child under 5 years diarrhoea with dehydration incidence was the highest in the province at 9.5 episodes per 1 000 children, and has increased from 6.6 episodes in 2011/12. The child under 5 years diarrhoea case fatality rate was 5.3%, the lowest in the province, but above the national average of 4.3%. The child under 5 years pneumonia incidence has decreased from 36.4 cases per 1 000 children in 2008/09 to 21.0 cases per 1 000 children in 2012/13, and was well below the national average of 66.8 cases per 1 000 children, ranking the district as having the lowest such incidence of all districts in the country. The child under 5 years pneumonia case fatality rate was at 6.2%. The child under 5 years severe acute malnutrition incidence was 3.1 cases per 1 000 children and has decreased steadily from 4.9 in 2009/10, and was the third lowest among the NHI districts. The child under 5 years severe acute malnutrition case fatality rate was 12.5%, being close to the national average of 12.7% and lower than the rate of 19.9% in 2011/12. The vitamin A coverage for children aged 12 to 59 months increased from 20.9% in 2007/08 to 28.7% in 2012/13 and is the lowest in the province, the fifth lowest in the country and the second lowest among the NHI districts.

a However, this may be due to a sampling error, as it is an outlier in the trend for this district.

The couple year protection rate at 33.1% was the lowest in the province and below the national average of 37.8%. The cervical cancer screening coverage was also the lowest in the province at 45.8%, and ranks the district as having the fourth lowest coverage among the NHI districts.

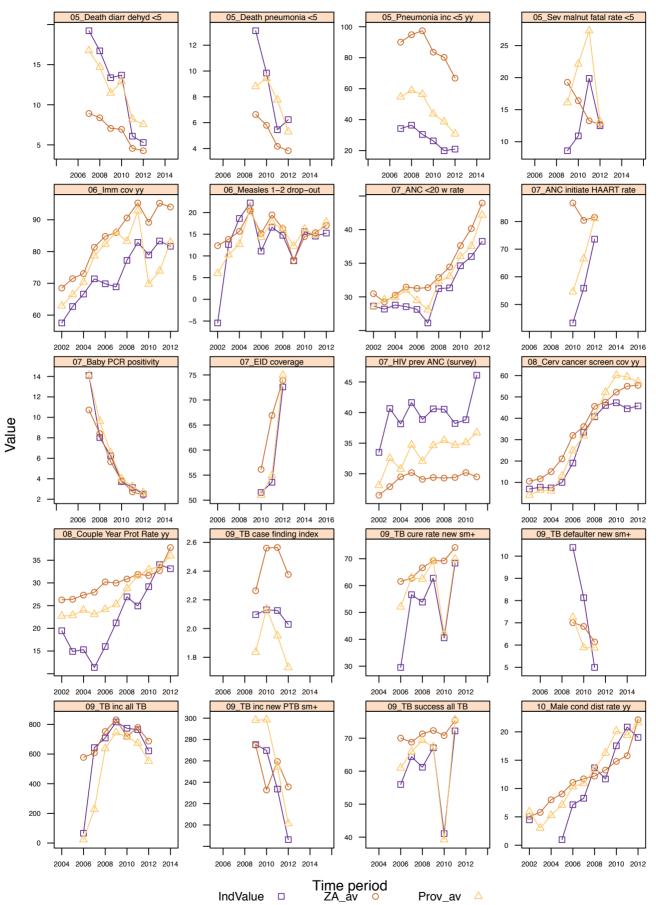
The TB incidence (all cases) was 621.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smearpositive) decreased from 2 207 in 2011 to 1 763. TB incidence (new pulmonary smear-positive), at 186.2 per 100 000 people in 2012, was the lowest provincially and was well below the national incidence of 235.7. The TB case finding index was 2.0%, the highest provincially but below the national average of 2.4% and the second lowest among the NHI districts. The TB (new pulmonary smear-positive) cure rate in Gert Sibande District was 68.3% in 2011, and the rate has increased by 27.7 percentage points since 2010, but in 2012/13 was still well below the national rate of 74.2% and the second lowest among the NHI districts. The TB (new pulmonary smear-positive) defaulter rate at 5.0% was the lowest provincially and lower than the national rate of 6.1%, and the TB treatment success rate (all TB) was 72.2%, also the lowest in the province.

The male condom distribution coverage was 19.0 condoms per male 15 years and older and below the national average of 22.1. The total number of adults remaining on ART at the end of the month was 54 079 by the end of 2012/13, many more than the 38 088 adults at the end of 2011/12. The total number of children under 15 years remaining on ART at the end of the month was 3 762 at the end of 2012/13, an increase of 1 424 children from the end of 2011/12.



#### Annual indicators for district: Gert Sibande: DC30

### Annual indicators for district: Gert Sibande: DC30



# **Nkangala District Municipality**

# Fiorenza Monticelli

Nkangala, one of the three districts in Mpumalanga Province, is situated in the north-western part of the province, bordering on the provinces of Gauteng in the west and Limpopo in the north. The district has an estimated medical scheme coverage of 13.2%.

The proportion of total district expenditure on district hospitals in Nkangala has decreased significantly since 2004/05 from 100.0% to 44.2% in 2012/13. Conversely, the proportion spent on primary health care (PHC) and district management has escalated from no spend in 2004/05, to 45.1% on PHC and 10.7% on district management in 2012/13. The expenditure on district management is above the national average of 3.4% and also the highest in the province. The spending on primary health care, however, is below the national average of 56.7%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) has decreased from 73.8% in 2011/12 to 69.2% in 2012/13, and is lower than the national average of 76.0% as well as the lowest rate of the three districts in Mpumalanga.

The inpatient bed utilisation rate in district hospitals has decreased slightly from 72.2% in 2011/12 to 70.8% in 2012/13, but is above the national average of 67.3%. The average length of stay was the same as the national average, at 4.2 days. The expenditure per patient day equivalent in 2012/13 was R1 913, the highest among the Mpumalanga districts, and more than the national average expenditure of R1 823. The ratio of ambulatory to inpatient days in 2012/13 was 1.9, well above the national average of 1.3 and the provincial average of 1.7. This indicates that more patients were seen in the emergency/ OPD units than were admitted as inpatients. The OPD new client not referred rate stands at 48.0%, and although this is almost double the rate in 2011/12, it is well below both the national (64.1%) and provincial (67.6%) averages. This indicated that almost half of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

In 2012/13, the delivery by Caesarean section rate in district hospitals increased to 18.7% from 15.7% in the year before, and was 2.1 percentage points below the national average of 20.8%. The rate has increased steadily from a low rate of 9.6% in 2007/08.

The delivery in facility under 18 years rate has remained fairly constant since 2009/10, and was 7.0% in 2012/13, the lowest in the province and close to the national average of 7.7%. The facility maternal mortality ratio was 174.5 per 100 000 live births, down from a high of 203.6 per 100 000 live births the year before, but above the national average of 132.9 per 100 000 live births. The stillbirth in facility rate was 28.1 per 1 000 births, the fifth highest in the country. The inpatient early neonatal death rate, at 9.5 deaths per 1 000 live births, was below the national average of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 42.9%. This is close to the national average of 44.0% but still below the national target of 50%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Sero-prevalence Survey) was 29.6%, the lowest in the province. The antenatal client initiated on ART rate increased by 28.5 percentage points from 2011/12 to 80.5%, and was in line with the national average of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed an increase of 16.2 percentage points from 2011/12 to 69.5% in 2012/13 in the early infant HIV diagnosis coverage. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.4% was the lowest provincially. However, it was lower than the 3.4% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data), which was the highest in the province.

In 2010/11 and 2011/12, Nkangala was ranked as the district with the second lowest immunisation coverage under 1 year in the country. However, in 2012/13, the immunisation coverage improved considerably to 85.2%, being the highest in the province and above the provincial average of 83.0%, although still below the national average of 94.0%. This increase in immunisation rate resulted in an improved ranking for the district to 32nd nationally. The measles 1st to 2nd dose drop-out rate increased by 4.1 percentage points from 2011/12 to 15.5% in 2012/13. Although high, this was below the national average of 17.0% and the provincial average of 17.8%.

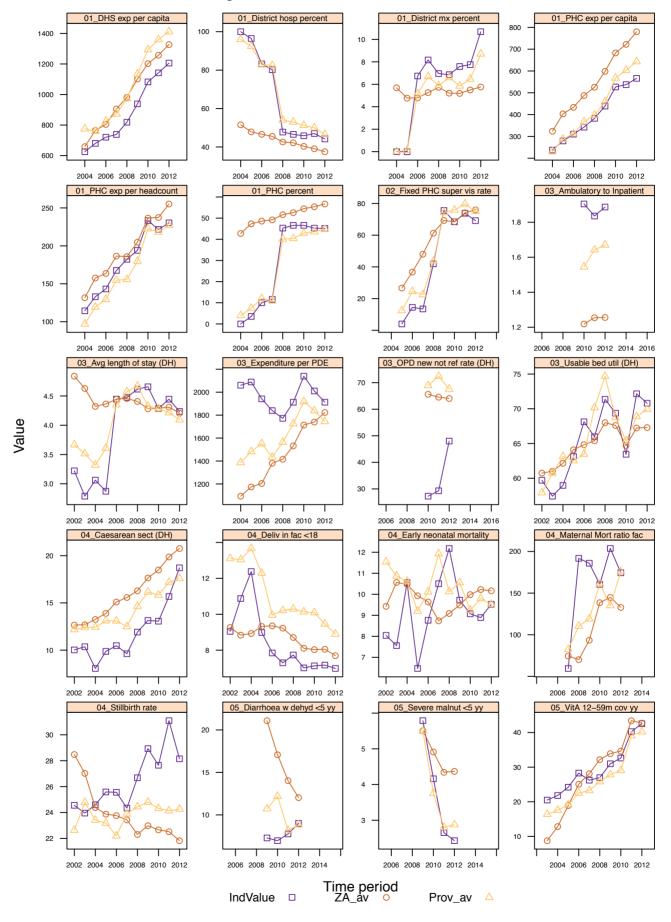
The child under 5 years diarrhoea with dehydration incidence was 9.0 episodes per 1 000 children and has increased annually from 7.0 in 2010/11. The child under 5 years diarrhoea case fatality rate was 5.7%, above the national average of 4.3%. The child under 5 years pneumonia incidence has decreased from 47.5 cases per 1 000 children in 2010/11 to 36.0, and was well below the national average of 66.8. The child under 5 years pneumonia case fatality rate was 3.0%, the lowest in the province. The child under 5 years severe acute malnutrition incidence was the lowest provincially at 2.4 cases per 1 000 children, and has decreased steadily from 5.8 in 2009/10. The child under 5 years severe acute malnutrition case fatality rate was also the lowest in the province at 10.9%, having dropped by 10.3 percentage points since the previous year. The vitamin A coverage for children aged 12 to 59 months has increased steadily since 2007/08 from 26.2% to 42.6% in 2012/13, close to the national average of 42.8%.

The couple year protection rate has increased by 11.5 percentage points over the last five years to 35.5% in 2012/13. Despite this growth, it is below the national average of 37.8%. The cervical cancer screening coverage in Nkangala has decreased sharply from a high of 69.8% in 2010/11 to 48.7%. This figure is below the national average of 55.4%.

#### Section B: Profile Mpumalanga Province

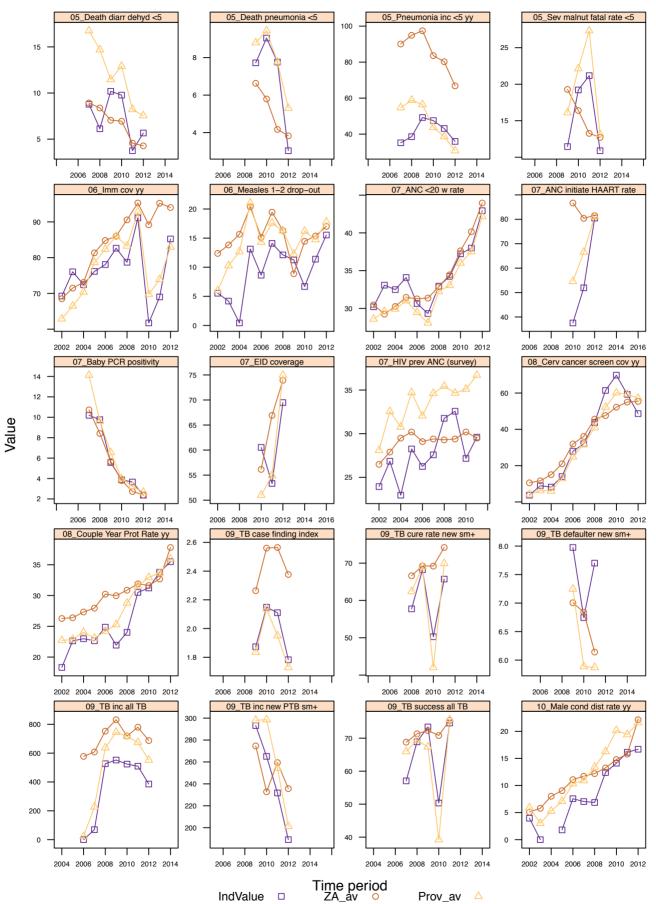
The TB incidence (all cases) at 385.6 per 100 000 people was the fifth lowest in the country in 2012, although the sharp decline should be investigated in case it represents missed case finding. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 639 in 2011 to 2 174. TB incidence (new pulmonary smear-positive) was 189.1 per 100 000 people in 2012. The incidence decreased from 231.7 per 100 000 people in 2011, and was well below the national incidence of 235.7. The TB case finding index was 1.8%, below the national average of 2.4%. The TB (new pulmonary smear-positive) cure rate was the lowest provincially at 65.7% in 2011. The rate has increased by 15.4 percentage points since 2010 (with 24.4% of outcomes lost to follow-up – not evaluated – in 2010) but was still well below the national rate of 74.2% and ranked the district fifth lowest nationally. The TB (new pulmonary smear-positive) defaulter rate was 7.7%, higher than the national rate of 6.1%, and the TB treatment success rate (all TB) was 74.6%.

The male condom distribution coverage in 2012/13 was 16.7 condoms per male 15 years and older, being the lowest in the province and below the national average of 22.1. The total number of number of adults remaining on ART at end of the month was 43 580 by the end of 2012/13, more than double the figure at the end of 2011/12 of 15 762 adults. The total number of children under 15 years remaining on ART at end of the month was 2 683 at the end of 2012/13, and is also more than double the figure of 1 282 children for the previous year.



#### Annual indicators for district: Nkangala: DC31

### Annual indicators for district: Nkangala: DC31



# **Ehlanzeni District Municipality**

# Fiorenza Monticelli

Ehlanzeni is one of the three districts in Mpumalanga province. Situated in the north-eastern part of the province, Ehlanzeni borders on Limpopo in the north, Swaziland in the south and Mozambique in the east. The district has an estimated medical scheme coverage of 11.8%, the lowest in the province.

As with all Mpumalanga's districts, the proportion of total district expenditure on district hospitals in Ehlanzeni has decreased significantly since 2004/05, from 91.3% to 43.8% in 2012/13. Conversely, the proportion spent on primary health care (PHC) has escalated from 8.7% to 47.7% in the same period. The proportion spent on district management has escalated from no spend in 2004/05 to 8.5% in 2012/13. The expenditure on district management for this district in 2012/13 was above the national average of 3.4%, and the spending on PHC was below the national average of 56.7%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) has decreased from 80.0% in 2011/12 to 75.5% in 2012/13, close to the national average of 76.0%

The inpatient bed utilisation rate in district hospitals has remained stable over the last two years at 70.0%, and in 2012/13 the rate was above the national average of 67.3%. The average length of stay was 4.0 days, the shortest in the province and below the national average of 4.2 days. The expenditure per patient day equivalent in 2012/13 was R1 824, and on par with the national average expenditure of R1 823. The ratio of ambulatory to inpatient days in 2012/13 was 1.3, the same as the national average but below the province average of 1.7. This indicates that more patients were seen at the emergency units and OPD clinics than were admitted to hospital. The district hospital OPD new client not referred rate was 75.1% in 2012/13, and although this had decreased from 98.3% in 2010/11, it is well above both the national (64.1%) and provincial (67.6%) averages. This indicates that a high percentage of patients bypass PHC facilities and access hospitals directly.

The delivery by Caesarean section rate was 15.9%, the lowest provincially and below the national average of 20.8%. The delivery in facility under 18 years rate has dropped consistently since 2008/09 and was 9.3% in 2012/13; however, it was still above the national average of 7.7%. The maternal mortality in facility ratio increased from 124.8 per 100 000 live births to 170.9 per 100 000 live births in 2012/13. The stillbirth in facility rate increased from 20.8 per 1 000 births in 2011/12 to 21.8 per 1 000 births in 2012/13, similar to the national average and the lowest rate in the province. The inpatient early neonatal death rate, however, decreased from 10.0 per 1 000 live births to 9.2 in the same period and was below the national average of 10.2 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 43.8% in 2012/13 and was close to the national average of 44.0% but still below the national target of 50%. The HIV prevalence among antenatal clients tested (2011 National Antenatal Seroprevalence Survey) in 2011 was high at 35.8%. The antenatal client initiated on ART rate was 85.6% and was the highest in the province. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 78.4%, a huge increase from 56.2% in 2011/12 and the highest in the province. This was also above the national average of 73.9% in 2012/13. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.8% was the highest provincially, but in line with the 2.9% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year increased steadily in this district from 69.7% in 2010/11 to 82.2% in 2012/13, close to provincial average of 83.0%, but remaining below the national average of 94.0%. The measles 1st to 2nd dose drop-out rate increased by 3.3 percentage points from 2011/12 to 20.3% in 2012/13, which is above both the national (17.0%) and provincial (17.8%) averages.

The child under 5 years diarrhoea with dehydration incidence was the lowest in the province at 8.3 episodes per 1 000 children in 2012/13, and has decreased annually from 15.2 per 1 000 children in 2009/10. However, the child under 5 years diarrhoea case fatality rate in 2012/13 was 11.2%, the highest in the province and well above the national average of 4.3%, ranking Ehlanzeni as having the fifth highest rate in the country. The child under 5 years pneumonia incidence has decreased from 78.6 cases per 1 000 children in 2009/10 to 33.0 in 2012/13 and was well below the national average of 66.8 per 1 000 children, ranking the district as having the seventh lowest incidence in the country. The child under 5 years pneumonia case fatality rate was 6.6% and the highest rate in the province in 2012/13, and although the rate has decreased annually from 9.5% in 2010/11, it was the ninth highest rate in the country in 2012/13. The child under 5 years severe acute malnutrition incidence was 3.1 cases per 1 000 children and has decreased steadily from 5.7 per 1 000 children since 2009/10, while the child under 5 years severe acute malnutrition case fatality rate was 14.5%, having dropped by 20.5 percentage points since the previous year. The vitamin A coverage in children aged 12 to 59 months has increased steadily since 2007/08 from 22.6% to 45.5% in 2012/13, in line with the national average of 42.8%, and the highest in the province.

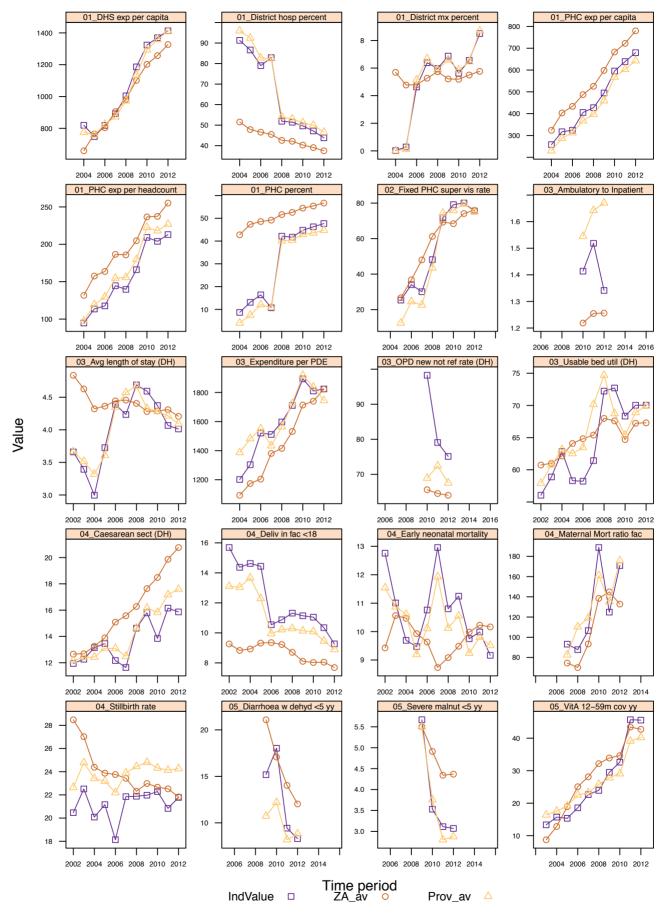
The couple year protection rate was 37.8% and on par with the national average of 37.8%. The cervical cancer screening coverage was the highest in the province in 2012/13 at 70.2%. This coverage was well above the national average of 55.4%, ranking Ehlanzeni among the 12 districts with the highest coverage rates in the country.

The TB incidence (all cases) was 630.4 per 100 000 people, well below the national average of 687.3 and the provincial average of 551.8 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased

#### Section B: Profile Mpumalanga Province

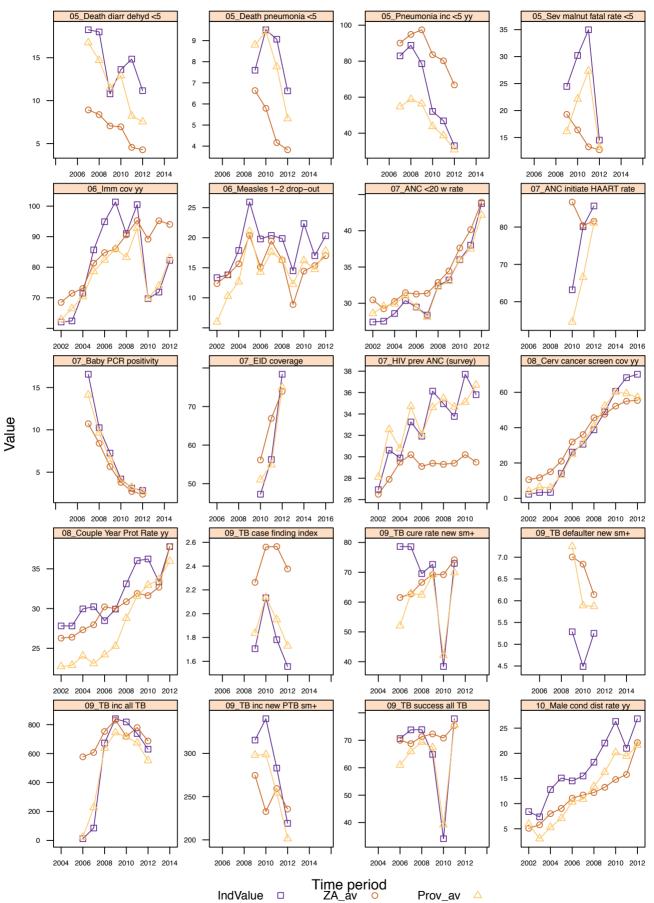
from 4 467 in 2011 to 3 491, and the TB incidence (new pulmonary smear-positive) was 219.1 per 100 000 people in 2012. This incidence decreased from 283.0 per 100 000 people and was below the national incidence of 235.7. The TB case finding index was 1.6%, the lowest provincially and below the national average of 2.4%. The TB (new pulmonary smear-positive) cure rate was the highest provincially at 73.0% in 2011, a considerable increase from the cure rate of 38.4% in 2010, which was due to data quality problems with 41.5% of treatment outcomes recorded as lost to follow-up (not evaluated). The TB (new pulmonary smear-positive) defaulter rate was 5.3%, lower than the national rate of 6.1%, and the TB treatment success rate (all TB) was 77.8%.

The male condom distribution coverage was 26.9 condoms per male 15 years and older, being the twelfth highest coverage in the country and above the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month was 101 879 adults by the end of 2012/13, representing a 38.4% increase over the figure at the end of 2011/12 of 73 608 adults, and by far the highest in the province. The total number of children under 15 years remaining on ART at end of the month was 6 056 in 2012/13, more than double the figure in the other two districts and had increased by 924 children over the previous year.



#### Annual indicators for district: Ehlanzeni: DC32

#### Annual indicators for district: Ehlanzeni: DC32



# **18 Northern Cape Province**

### John Taolo Gaetsewe District Municipality

### Morton Sello Mashishi

John Taolo Gaetsewe (formerly Kgalagadi) District is one of the five districts in the Northern Cape Province. The proportion of the population estimated to have medical scheme coverage was 12.2%, the lowest in the province.

The proportion of total district expenditure on district hospitals was 38.1%, higher than the provincial average of 28.0%. The proportion spent on primary health care (PHC) was 52.6%, and the proportion of the health services district budget spent on district management was 9.3%, the same as the provincial average.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 56.1% and although the highest provincially, was well below the national average of 76.0%.

The inpatient bed utilisation rate was 59.5%, below the national average of 67.3%. The average length of stay was 3.6 days. The expenditure per patient day equivalent was R1 923, higher than the provincial average of R1 855 and the national average of R1 823. The ratio of ambulatory to inpatient days was 0.5, being the lowest in the district and below the national ratio of 1.3. This indicates that more patients were admitted as inpatients than were seen at the emergency units and OPD clinics. The OPD new client not referred rate was the lowest in the province at 49.6%. This indicated that almost half of all patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

Delivery by Caesarean section rate was the second lowest in the province at 12.7%. The delivery in facilities under 18 years rate increased from 9.4% in 2011/12 to 11.5%. The maternal mortality in facility ratio was the highest provincially at 260.5 per 100 000 live births, and much higher than the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate was the highest in the province at 28.4 per 1 000 births. The inpatient early neonatal death rate increased from 5.0 per 1 000 live births in 2011/12 to 8.2 per 1 000 live births in 2012/13, but variations over the past 10 years make trends difficult to discern, and data quality may be a problem given how low the rate is in comparison to the stillbirth rate.

The antenatal 1st visit before 20 weeks rate at 44.1% was the lowest in the province, on par with the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed HIV prevalence among antenatal clients tested was 17.7%. The antenatal client initiated on ART rate was 84.3%, an increase from 50.6% in 2011/12. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 72.7%. It increased from 57.2% in 2011/12 and was in line with the national rate of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was 3.2%. The NHLS value was higher than the 2.3% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year was 117.1%. A coverage value exceeding 100% may be due to poor data quality or an underestimation of the under-1 population. The measles 1st to 2nd dose drop-out rate was 16.1%.

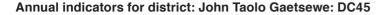
The child under 5 years diarrhoea with dehydration incidence increased from 8.2 episodes per 1 000 children in 2011/12 to 12.6 per 1 000 children in 2012/13, but was in line with the national incidence of 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate decreased from 13.2% to 2.1% in the same period. The child under 5 years pneumonia incidence increased from 98.6 cases per 1 000 children in 2011/12 to 106.9; this was the second highest in the province and well above the national average of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate of 9.5% was also the second highest provincially and almost three times higher than the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence increased slightly from 4.1 cases per 1 000 children in 2011/12 to 5.4 cases per 1 000 children in 2012/13. The child under 5 years severe acute malnutrition case fatality rate decreased annually from 19.5% in 2009/10 to 7.0% in 2011/12. The vitamin A coverage in children aged 12 to 59 months increased from 28.4% in 2011/12 to 35.3%, and was in line with the provincial average of 36.4%.

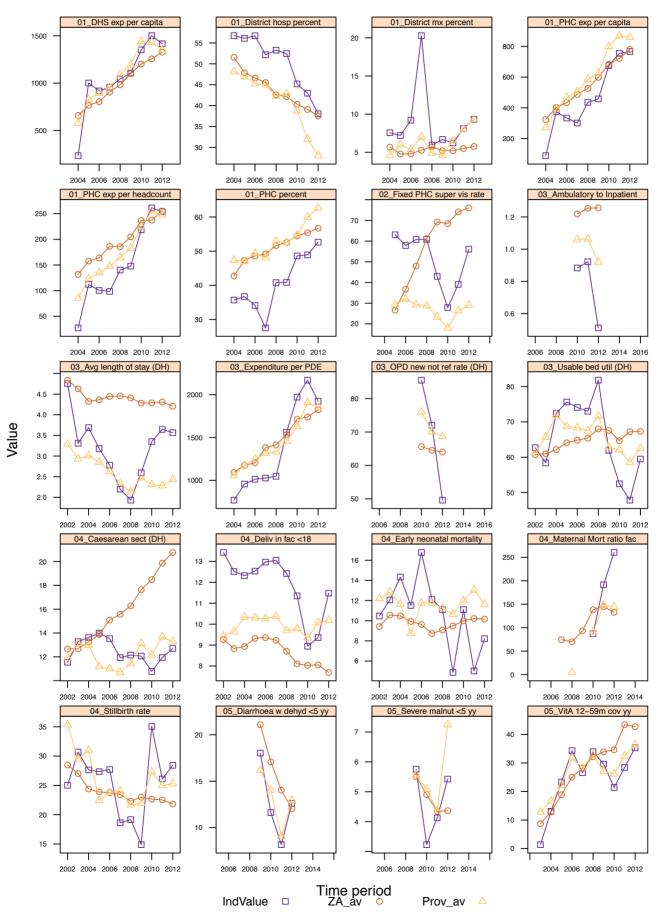
The couple year protection rate was 32.9%. The cervical cancer screening coverage was 23.5%, a decrease from 43.5% in 2010/11 and now less than half of the national average of 55.4%.

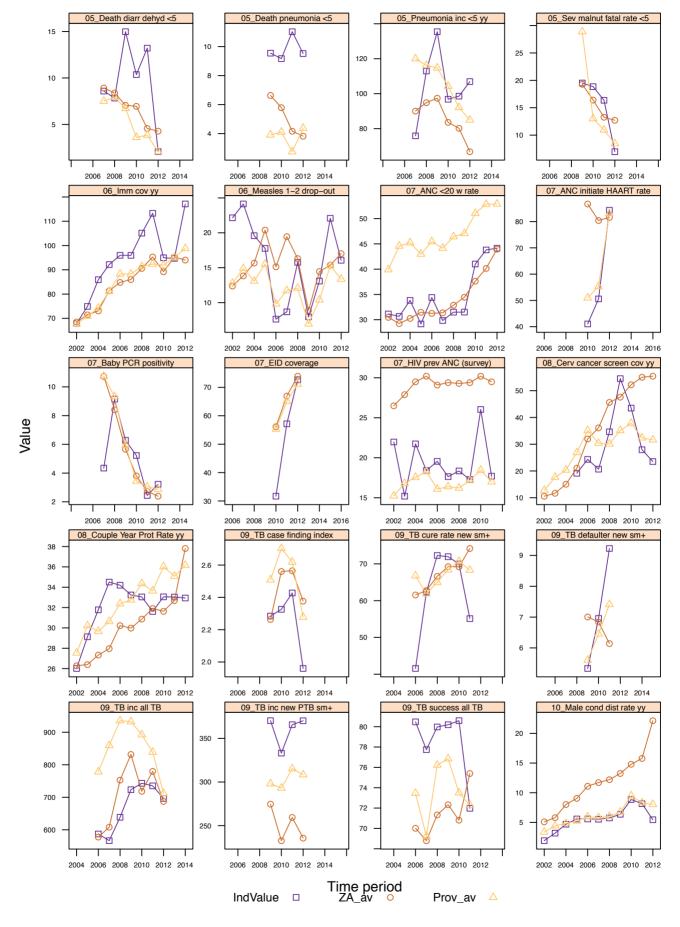
The TB incidence (all cases) was 696.5 per 100 000 people and in line with the national average of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 796 in 2011 to 810, and the TB incidence (new pulmonary smear-positive) was 370.2 per 100 000 people, the highest provincially and above the national incidence of 235.7. The TB case finding index was 2.0%. The TB (new pulmonary smear-positive) cure rate was the lowest in the province at 55.1% in 2011 and well below the national rate of 74.5%, while the TB (new pulmonary smear-positive) defaulter rate was 9.2%. The TB treatment success rate (all TB) was 72% and slightly below the national rate of 75.4%.

Male condom distribution coverage, at 5.6 condoms per male 15 years and older, was the lowest provincially and almost four times lower than the national average of 22.1 condoms. The total number of adults remaining on ART at the end of the month increased from 347 at the end of 2011/12 to 2 961 by the end of 2012/13. The total number of children under 15

years remaining on ART at end of the month increased from 1 to 52 in the same period, and JT Gaetsewe was the district with the lowest number of children on ART nationally.







#### Annual indicators for district: John Taolo Gaetsewe: DC45

# Namakwa District Municipality

### Naomi Massyn

The Namakwa District is the Northern Cape Province's largest district. An estimated 21.5% of the district's population belong to a medical scheme, representing the highest coverage in the province.

The proportion of district health services expenditure on district management was 11.8%, the highest since 2004/05 and the third highest in the country. The proportion of total district expenditure on primary health care (PHC) was 59.2%, slightly higher than the 57.9% of 2011/12. At 29%, the percentage expenditure on district hospital services is the lowest since 2004/05, on par with the national average of 30.4%, but lower than the provincial average of 54.5%. This might be due to the reclassification of district hospitals as community health centres.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) remained exceptionally low at 0.5%, a decrease of more than seven percentage points from 2011/12. This is well below the national rate of 76.0% and is the lowest in the country, requiring urgent attention from district managers.

The inpatient bed utilisation rate was 87.9%, well above the provincial rate of 62.5%. The average length of stay was 2.4 days, the third shortest in the country. The expenditure per patient day equivalent was R1 891, slightly lower than the R2 125 recorded in 2011/12. The OPD new client not referred rate has been 56.9% for the past two years and below the national (64.1%) and provincial (68.7%) averages. This indicates that more than half of all patients seen at the emergency/ OPD units bypass PHC facilities and access district hospitals directly. The ratio of ambulatory to inpatient days was 1.3, higher than the provincial ratio of 0.9 and on par with the national ratio of 1.3. This indicates that more patients were seen at the emergency units and OPD clinics than were admitted to hospital.

The delivery by Caesarean section rate has increased annually from 17.6% in 2007/08 to 25.4% in 2012/13, now being the highest in the province and above the national rate of 20.8%. The delivery in facility under 18 years rate was 9.8%. The facility maternal mortality ratio reflected zero per 100 000 live births, a drop from 65.5 per 100 000 live births in 2011/12, this however could be a reflection of incomplete data recording. The stillbirth in facility rate decreased annually from 24.1 per 1 000 births in 2010/11 to 17.6 per 1 000 births, and the inpatient early neonatal death rate also dropped from 15.2 per 1 000 live births to 7.7 in the same period.

The antenatal 1st visit before 20 weeks rate has increased annually from 60.9% in 2009/10 to 70.4% in 2012/13 and is now the highest in the province, being well above the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows an HIV prevalence among antenatal clients tested of 6.2%. The antenatal client initiated on ART rate increased from 45.5% in 2011/12 to 73.2%, but this was still well below the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) shows that the early infant HIV diagnosis coverage decreased from 73.8% in 2011/12 to 56.0% in 2012/13. This was well below the national coverage of 73.9%. However, with such low numbers in this district, this finding may be an artefact of the denominator of the number of babies exposed to HIV. Although not always reliable, the equivalent DHIS indicator based on live births to HIV-positive women in the district reflected good coverage of baby PCR 6 week uptake, being at 98.6% in 2011/12 and 83.6% in 2012/13. The infant 1st PCR test positive around 6 weeks rate (DHIS data) was 7.8%, a decrease from 8.2% in 2011/12. This was, however, the highest in the province, well above the national average of 2.5%, and also much higher than the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 4.7%.

The immunisation coverage under 1 year was 82.8%, well below the provincial (98.8%) and national (94%) coverage. At 17.6%, the measles 1st to 2nd dose drop-out rate was the highest in the province and above the national rate of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was 5.5 episodes per 1 000 children, the lowest in the province and well below the national incidence of 12.0 per 1 000 children. However, the child under 5 years diarrhoea case fatality rate of 5.5% was the highest in the province and above the national rate of 4.3%. The child under 5 years pneumonia incidence dropped from 41.4 cases per 1 000 children in 2011/12 to 24.6, and remains well below national and provincial averages; however, the child under 5 years pneumonia case fatality rate increased from 0.9% in 2011/12 to 15.6% in 2012/13, the highest in the province and nationally. At 0.9 cases per 1 000 children, the child under 5 years severe acute malnutrition incidence was the lowest in the province and decreased annually from 4.2 per 1 000 children in 2009/10. The child under 5 years severe acute malnutrition case fatality rate of 22.7% was also the highest in the province and the third highest in the country. There have been vast annual fluctuations in this rate since 2009/10 because the number of cases was very low. The vitamin A coverage 12 to 59 months was 26.9%, substantially lower than the national average of 42.8% and second lowest in the country.

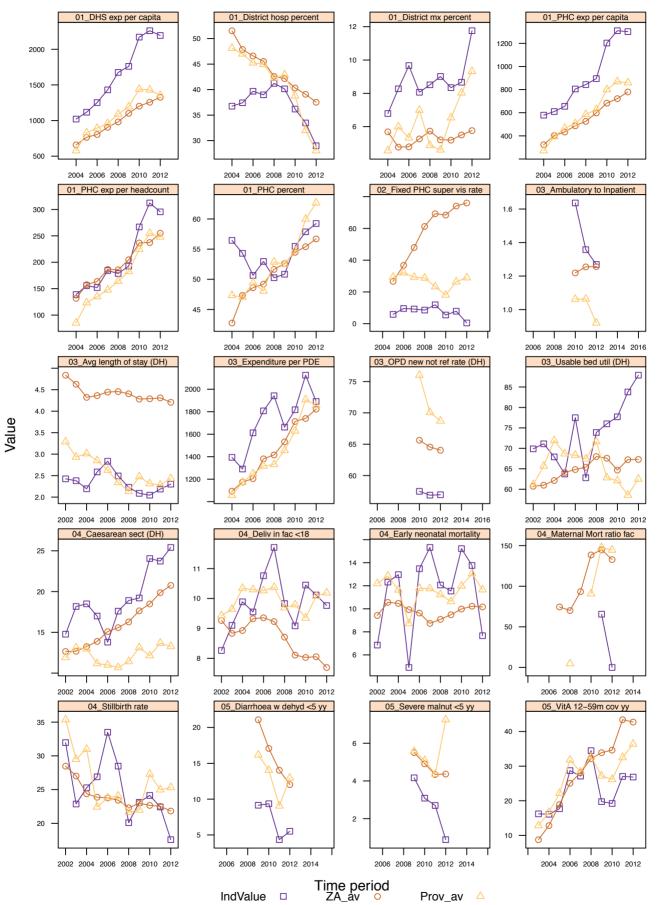
The cervical cancer screening coverage marginally decreased from 26.0% in 2011/12 to the current 24.8%, and was lower than both the provincial (31.6%) and national (55.4%) averages. However, the couple year protection rate increased from 47.6% to 50.9% in the same period, well above the provincial (36.2%) and national (37.8%) rates.

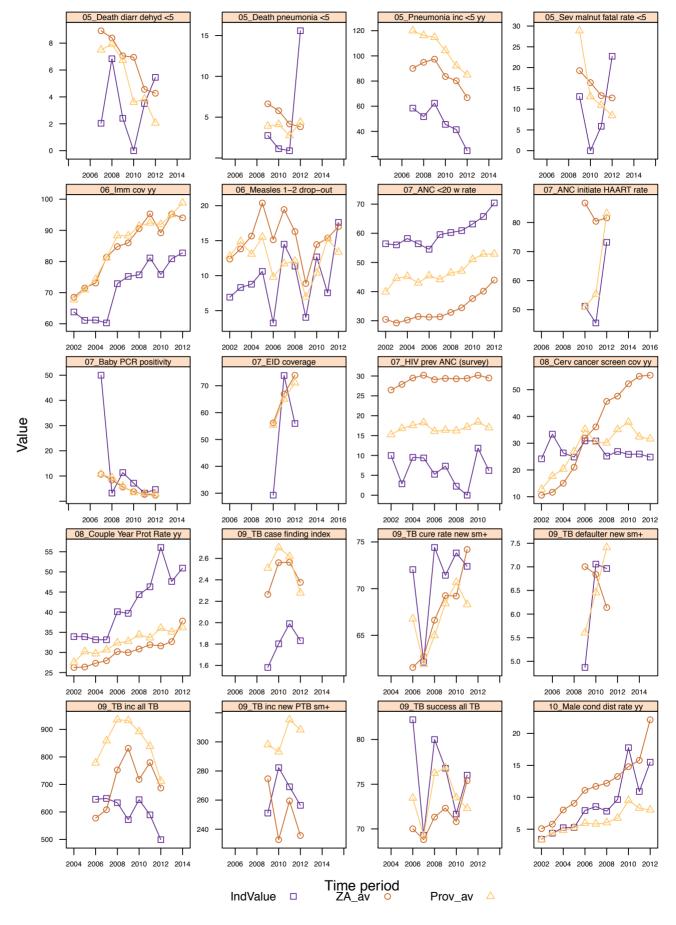
The TB incidence (all cases) of 499.2 per 100 000 people was the lowest in the province and below the national incidence of 687.3 per 100 000 people. The TB case finding index was 1.8%. The number of cases diagnosed with TB (new pulmonary

smear-positive) decreased from 337 in 2011 to 322, reflecting a drop in TB (new pulmonary smear-positive) incidence from 269.1 per 100 000 people to 256.4, but this was above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate decreased from 73.8%% in 2010 to 72.4% in 2011, but was still above the provincial rate of 68.3%. The new TB (new pulmonary smear-positive) defaulter was 7.0%, and the TB treatment success rate (all TB) was 76%, the highest in the province and on par with the national rate of 75.4%.

At 15.5 condoms per male 15 years and older, the male condom distribution coverage increased from 10.9 condoms in 2011/12 and was the best in the province. However, it was still well below the national average of 22.1 condoms per male 15 years and older. The total number of adults remaining on ART at end of the month increased from 714 at the end of 2011/12 to 1 073 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 59 to 113 in the same period.

#### Annual indicators for district: Namakwa: DC6





### Annual indicators for district: Namakwa: DC6

# Pixley ka Seme District Municipality

## **Myekeni Moses Thibane**

Pixley ka Seme District lies in the south-east of the Northern Cape Province. The proportion of the district's population with medical scheme coverage was estimated at 15.8%, the third highest coverage in the province.

The proportion of total district expenditure on district hospitals was 33.5%, the proportion spent on primary health care (PHC) was 57.1%, and the proportion spent on district management was 9.4%, similar to the provincial average of 9.3%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 21.1%, a decrease of five percentage points from the 2011/12 value of 26.1%, and was the third lowest in the province.

The inpatient bed utilisation rate was 54.0%, a slight increase from 52.9% in 2011/12, and well below both the provincial average of 62.5% and national average of 67.3%. The average length of stay was 2.3 days. The expenditure per patient day equivalent of R2 016 was above the national average of R1 823. The ratio of ambulatory to inpatient days is the highest in the province at 1.6, even higher than the national average of 1.3. This indicates that more patients were seen at the emergency units and OPD clinics than were admitted to hospital. The OPD new client not referred rate was the second highest in the province at 82.3% and this is also above the national rate of 64.1%, which suggests that a high percentage of patients bypass the PHC facilities and access the district hospitals directly.

Delivery by Caesarean section rate was the second highest in the province at 18.1%, a slight decrease from the previous year's rate of 19.8%. The delivery in facility under 18 years rate remained stable at 10.1%. The maternal mortality in facility ratio was 31.9 per 100 000 live births and much lower than the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate decreased from 21.4 per 1 000 births in 2011/12 to 13.2 per 1 000 births in 2012/13, and the inpatient early neonatal death rate decreased from 19.4 per 1 000 live births in 2011/12 to 10.9 per 1 000 live births in 2012/13, although with relatively low numbers. This rate has fluctuated in a similar way over the past 10 years, making it difficult to discern any real trend.

The antenatal 1st visit before 20 weeks rate at 58.2% was above the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed HIV prevalence among antenatal clients tested of 15.1%, this being the second lowest provincially. The antenatal client initiated on ART rate was 72.2%, an increase from 69.0% in 2011/12. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 60.9%. This was below the national rate of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was 3.2% and decreased from 4.9% in 2011/12. The NHLS value was higher than the 2.4% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

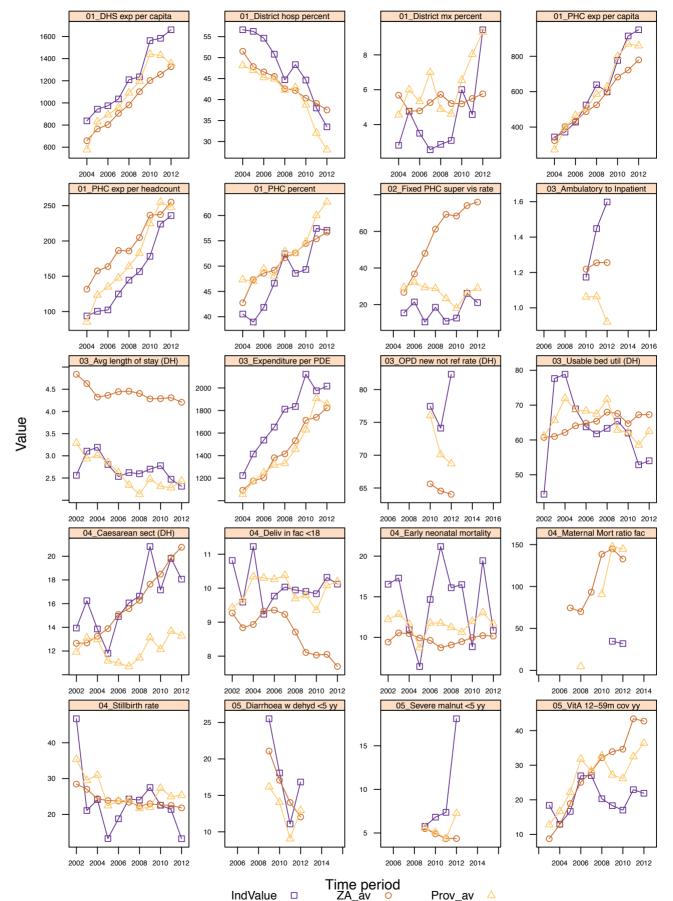
The immunisation coverage under 1 year was 78.9%, lower than both provincial (98.8%) and national (94.0%) averages. The measles 1st to 2nd dose drop-out rate decreased from 18.3% in 2010/11 to 13.6% in 2011/12.

The child under 5 years diarrhoea with dehydration incidence at 16.8 episodes per 1 000 children was the highest provincially and higher than the national average of 12.0 per 1 000 children, whereas the child under 5 years diarrhoea case fatality rate at 0.6% was the lowest in the province and the eighth lowest in the country. The child under 5 years pneumonia incidence was 52.4 cases per 1 000 children, and was below the provincial and national averages of 85.0 and 66.8 per 1 000 children respectively. The child under 5 years pneumonia case fatality rate at 0.5% was the lowest in the province and the country. The child under 5 years severe acute malnutrition incidence was 18.1 cases per 1 000 children and the highest provincially, whereas the child under 5 years severe acute malnutrition case fatality rate was 6.6% and the lowest since 2009/10. The vitamin A coverage in children aged 12 to 59 months was the lowest in the province at 21.9% and well below the provincial average of 36.4%.

The couple year protection rate was 35.1% and the cervical cancer screening coverage was 31.6%, both falling short of the national targets.

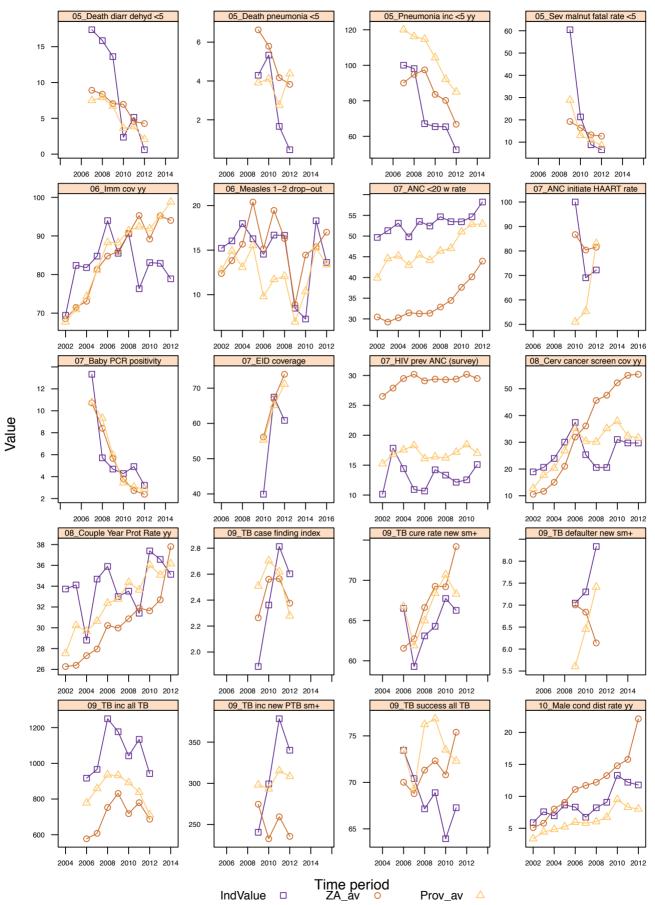
The TB incidence (all cases) was 942.5 per 100 000 people, well above the national average of 687.3 per 100 000 people. This was the highest incidence in the province and the ninth highest in the country. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 727 in 2011 to 655. TB incidence (new pulmonary smear-positive) was 340.1 per 100 000 people, the second highest provincially and above the national incidence of 235.7. The TB case finding index was 2.6%. The TB (new pulmonary smear-positive) cure rate was 66.3% in 2011 and well below the national rate of 74.5%. The TB (new pulmonary smear-positive) defaulter rate was 8.3%, and the TB treatment success rate (all TB) was 67.3% and below the national rate of 75.4%.

Male condom distribution coverage was 11.8 condoms per male 15 years and older, which was almost half of the national average of 22.1 condoms. The total number of adults remaining on ART at the end of the month increased from 1 887 at the end of 2011/12 to 3 787 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month increased from 194 to 343 in the same period.



### Annual indicators for district: Pixley ka Seme: DC7

### Annual indicators for district: Pixley ka Seme: DC7



# Siyanda District Municipality

## **Morton Sello**

Siyanda District in the Northern Cape Province has an estimated medical scheme coverage of 16.5%.

The proportion of total district expenditure on district hospitals was 28.5%, which was close to half of the provincial average of 54.5%. The proportion spent on primary health care (PHC) was 57.9%. The proportion of the health services district budget spent on district management, at 13.6%, was the highest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) at 6.9%, was the second lowest in the province and well below the national rate of 76%.

The inpatient bed utilisation rate was 84.0% and well above the provincial average of 62.5% as well as the national average of 67.3%. The average length of stay was 2.9 days and this has remained virtually unchanged for 10 years. The expenditure per patient day equivalent of R1 020 was the lowest provincially and well below the national average of R1 823.<sup>a</sup> The ratio of ambulatory to inpatient days was 0.7 and this indicates that more patients were admitted as inpatients than were seen at the emergency units and OPD clinics. The OPD new client not referred rate was the second lowest in the province at 51.9%. This indicated that more than half of patients seen at the emergency/OPD units bypass PHC facilities and access district hospitals directly.

No Caesarean sections were performed at any of the district hospitals in Siyanda District.<sup>b</sup> The delivery in facility under 18 years rate at 11.8% was the highest in the province. The maternal mortality in facility ratio was 24.3 per 100 000 live births and much lower than the national ratio of 132.9. The stillbirth in facility rate increased by over 50.0% from 16.9 per 1 000 births in 2009/10 to 27.9 in 2012/13. The inpatient early neonatal death rate decreased from 13.2 per 1 000 live births in 2011/12 to 8.0 per 1 000 live births in 2012/13, and there has been a downward trend in this rate over 10 years, despite some year-on-year fluctuations.

The antenatal 1st visit before 20 weeks rate at 53.5% was above the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey showed an HIV prevalence among antenatal clients tested of 19.1%. The antenatal client initiated on ART rate of 87.3% was the highest in the province and increased from 54.3% in 2011/12. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 42.4%. This was the lowest provincially and well below the national rate of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was 3.2%. The NHLS value was higher than the 2.1% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under one year was 85.2%, lower than both provincial (98.8%) and national (94.0%) averages. The measles 1st to 2nd dose drop-out rate increased from 12.6% in 2010/11 to 17.4% in 2011/12.

The child under 5 years diarrhoea with dehydration incidence was 14.4 episodes per 1 000 children. The child under 5 years diarrhoea case fatality rate was 1.3%, the second lowest rate in the province. The child under 5 years pneumonia incidence, at 124.4 cases per 1 000 children, was the highest in the province and well above the national average of 66.8 per 1 000 children. The child under 5 years pneumonia case fatality rate at 1.8% was the second lowest in the province and has decreased annually from 3.1% in 2010/11. The child under 5 years severe acute malnutrition incidence was 5.5 cases per 1 000 children, and the child under 5 years severe acute malnutrition case fatality rate was 5.3% and the lowest since 2009/10. Vitamin A coverage in children aged 12 to 59 months was 28.5% and well below the provincial average of 42.8%.

The couple year protection rate was 34.2% and increased from 28.1% in 2011/12. The cervical cancer screening coverage was very low at 31.2%.

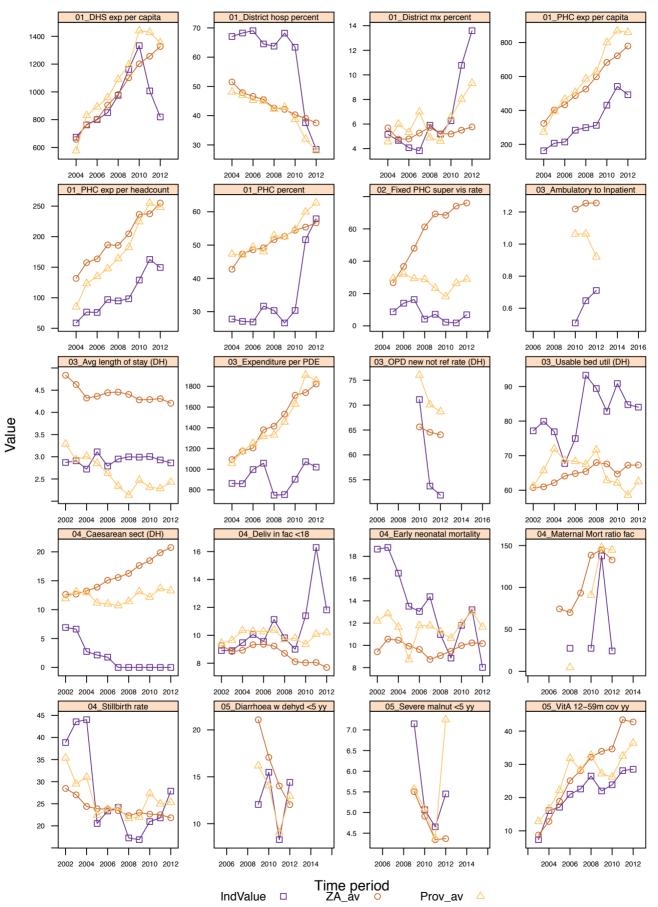
The TB incidence (all cases) was 842.6 per 100 000 people. This had decreased from 940.2 in 2011/12, but was still the second highest provincially and well above the national average of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 832 in 2011 to 844. TB incidence (new pulmonary smear-positive) was 339.9 per 100 000 people and above the national incidence of 235.7. The TB case finding index was 2.9%. The TB (new pulmonary smear-positive) cure rate was 71.3% in 2011 and below the national rate of 74.5%. The TB (new pulmonary smear-positive) defaulter rate was 9.9% and the highest provincially, and the TB treatment success rate (all TB) was 73.0% and below the national rate of 75.4%.

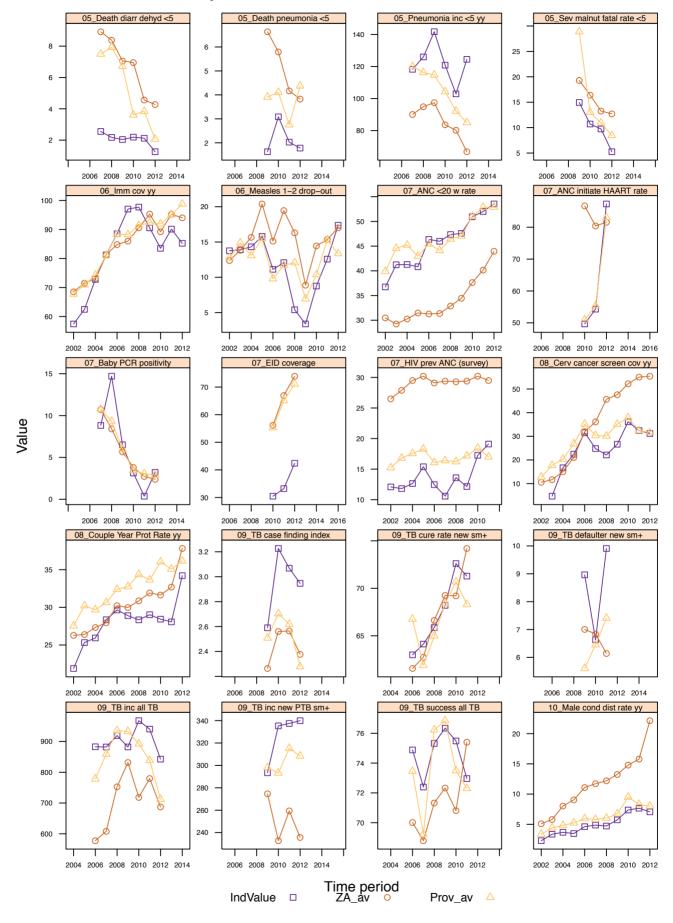
Male condom distribution coverage was 7.1 condoms per male 15 years and older and more than three times lower than the national average of 22.1 condoms. The total number of adults remaining on ART increased from 3 340 at the end of 2011/12 to 4 378 by the end of 2012/13. The total number of children under 15 years remaining on ART increased from 270 to 346 in the same period.

a No obvious reason is apparent for the low expenditure per PDE in Kakamas and Postmasburg Hospitals.

b More than half of the deliveries in Siyanda District take place at regional hospital level, where the C-section rate is 25.5%.

#### Annual indicators for district: Siyanda: DC8





### Annual indicators for district: Siyanda: DC8

### **Frances Baard District Municipality**

# Masego Qholosha and Jacqueline Habana

Frances Baard is the smallest district in the Northern Cape Province, with approximately 14.3% of the population belonging to a medical scheme.

The proportion of the district health services expenditure on district management is the lowest in the province at 6.1%, 3.2 percentage points lower than the provincial average (9.3%). The proportion of district expenditure on district hospitals decreased slightly from 17.5% in 2011/12 to 16.8% in 2012/13, the lowest in the province and well below the provincial (28.0%) and national (37.5%) averages. The proportion spent on primary health care (PHC) is the highest in the province with a slight increase from 74.1% in 2011/12 to 77.0%, and this is well above the provincial average of 62.7% and national average of 56.7% and the fourth highest nationally.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) had a slight increase from 51.1% in 2011/12 to 52.3%; being the second highest in the province and well above the provincial rate of 29.0% but still far below the national average of 76.0%.

The inpatient bed utilisation rate was 43.6%, a decrease from 50.4% in 2011/12 and well below the provincial (62.5%) and national averages (67.3%). The average length of stay at 1.1 days was the shortest in the province, below the provincial (2.4) and national (4.2) averages and for the past 10 years this duration has remained below the provincial average. The expenditure per patient day equivalent was R2 504, R649 more than the provincial average, and almost five times higher than the R453 in 2010/11.<sup>a</sup> The ratio of ambulatory to inpatient days is on par with the provincial average at 0.9 but below the national rate of 1.3. The district OPD new client not referred rate was the highest in the province at 94.9% and well above the provincial and national averages of 68.7% and 64.1% respectively. This rate is the second highest in the country, and indicates that a very high percentage of patients bypass the PHC facilities and access the district hospitals directly.

The delivery by Caesarean section rate of 8.1% was the lowest in the province and well below the national rate of 20.8%. The delivery in facility under 18 years rate increased from 7.9% in 2011/12 to 8.4% in 2012/13, being the lowest in the province but in line with the national rate of 7.7%. The maternal mortality in facility ratio increased annually from 175.7 per 100 000 live births in 2010/11 and was 204.1 per 100 000 live births in 2012/13, much higher than the national ratio of 132.9 per 100 000 live births. The stillbirth in facility rate remained stable and was 28.1 per 1 000 births. The inpatient early neonatal death rate was 16.1 per 1 000 live births, which was the highest provincially and has climbed steadily from 6.1 in 2007/08.

The antenatal 1st visit before 20 weeks rate was 53.7%, a decrease from 56.6% in 2011/12 but above the provincial (52.9%) and national (44%) averages. The 2011 National Antenatal Sero-prevalence Survey shows an HIV prevalence among antenatal clients tested of 18.4% which was the second highest provincially. The antenatal client initiated on ART rate was 84.8%, an increase of 28.1 percentage points from 56.7% in 2011/12.

Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 89.5%. This was the highest in the province and well above the national rate of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.5% was the lowest provincially, and was also below the 3.1% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year was 111.1%. A coverage value exceeding 100% may be due to poor data quality or an underestimation of the population under one year. The measles 1st to 2nd dose drop-out rate decreased from 12.6% to 7.8% and was the lowest in the province.

The child under 5 years diarrhoea with dehydration incidence at 12.4 episodes per 1 000 children increased from 10.4 episodes in 2011/12 and was in line with the provincial (12.9) and national (12.0) averages. The child under 5 years diarrhoea case fatality rate was 4.0% and also increased from 3.1% in the same period. The child under 5 years pneumonia incidence was 80.4 cases per 1 000 children and decreased from 134.7 episodes in 2010/11. This was below the provincial average of 85.0 episodes per 1 000 children but above the national average of 66.8 episodes per 1 000 children. The child under 5 years pneumonia case fatality rate was the third lowest in the province at 3.9% and in line with the national average (3.8%). However, it has increased by 1.5 percentage points since 2011/12. The child under 5 years severe acute malnutrition incidence was 5.8 cases per 1 000 children, an increase from 3.3 episodes in 2011/12. The child under 5 years severe acute malnutrition case fatality rate has fluctuated between 8.6% and 16.9% over the past four years and was 11.0% in 2012/13. Vitamin A coverage among children aged 12 to 59 months was the highest in the province at 51.5% and is well above the provincial average of 36.4% and ranked eleventh highest in the country.

The couple year protection rate was 35.2%. The cervical cancer screening coverage at 39.6% was the highest in the province.

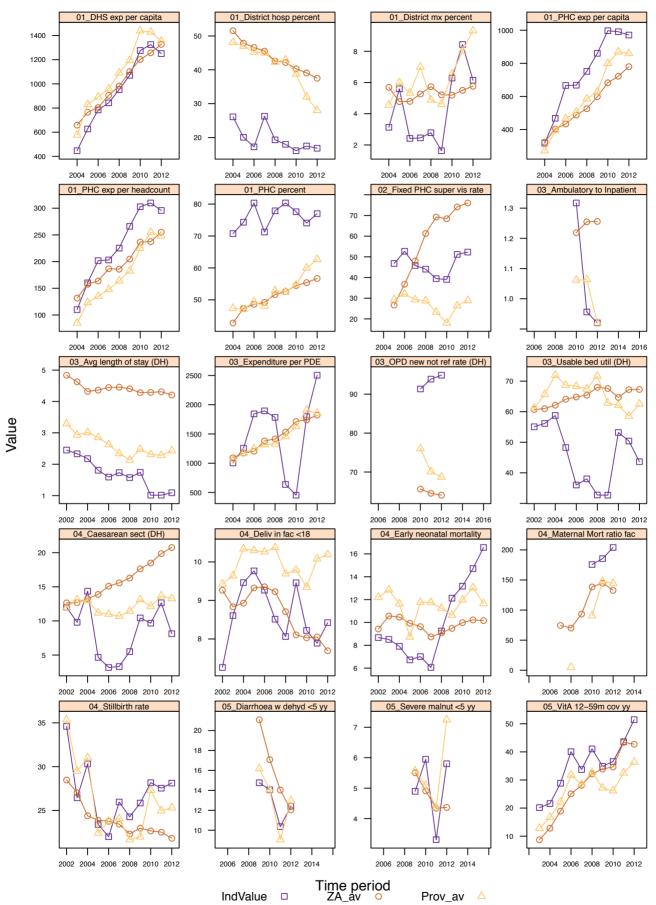
The TB incidence (all cases) was 613.6 per 100 000 people, being the second lowest provincially and below the national average of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 959 in 2011 to 954 and the TB incidence (new pulmonary smear-positive) was 252.9 per 100 000 people, also the

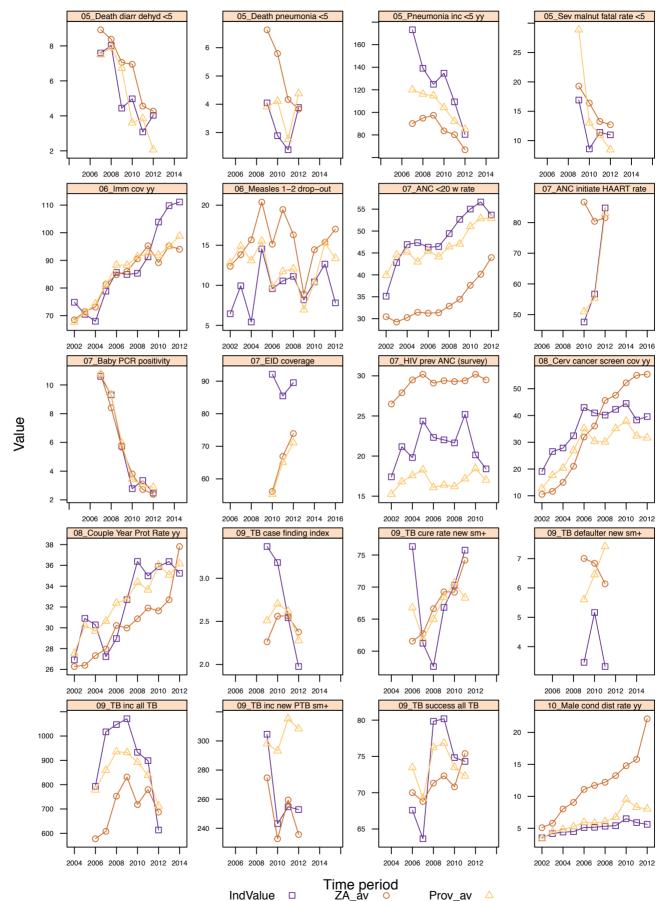
a These extreme fluctuations appear to be due to infrastructure changes in one of the two district hospitals, with more than half of expenditure on Prof ZK Matthews Hospital in sub-programme 8.3 from 2005/06 - 2010/11.

second lowest provincially but above the national incidence of 235.7. The TB case finding index was 2.0%, and has declined considerably from 3.4 in 2009/10. The TB (new pulmonary smear-positive) cure rate was the highest provincially at 75.8% in 2011 and is in line with the national rate of 74.5%. The TB (new pulmonary smear-positive) defaulter rate was 3.3%, and TB treatment success rate (all TB) was 79.1% and above the national rate of 75.4%.

Male condom distribution coverage was 5.6 condoms per male 15 years and older and in the past six years has never reached the provincial or national averages. The total number of adults remaining on ART at the end of the month increased from 2 974 at the end of 2010/11 to 11 178 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month increased from 1 380 to 2 147 in the same period.

#### Annual indicators for district: Frances Baard: DC9





### Annual indicators for district: Frances Baard: DC9

# **19 North West Province**

# **Bojanala Platinum District Municipality**

Bojanala Platinum District is situated in the north-eastern corner of the North West Province. The estimated proportion of the population with medical scheme coverage is 13.1%.

The proportion of the district health services expenditure in 2012/13 on district management was 7.8%, while 25.7% was spent on district hospitals. The proportion of the district health services expenditure on primary health care (PHC) decreased from 68.3% in 2011/12 to 66.4% in 2012/13.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) increased from 47.3% in 2011/12 to 57.7% in 2012/13. However, this is still the lowest in the province and well below the national average of 76.0%.

The inpatient bed utilisation rate increased from 74.6% in 2011/12 to 81.2% in 2012/13. This rate has increased steadily since 2008/09. The average length of stay was 3.4 days, shorter than the provincial length of stay of 3.7 days. The expenditure per patient day equivalent was R1 835, in line with the national average of R1 823. The ratio of ambulatory to inpatient days was 1.5, slightly higher than the national ratio of 1.3. A ratio of more than one means that more clients are seen at the emergency unit/OPD clinics than are admitted to hospital. The OPD new client not referred rate is 72.5%, a huge increase from 20.5% in 2011/12. This very large increase is due to Brits Hospital reporting around 90% of new clients as 'not referred' from 2012/13. This implies that there is no gatekeeping and no referral system in place.

The proportion of deliveries in facilities by women under 18 years was 6.3% in 2012/13, similar to 2011/12. The delivery by Caesarean section rate increased from 20.9% in 2011/12 to 23.5% in 2012/13. The stillbirth rate was 24.0 per 1 000 births, and the inpatient early neonatal death rate was 9.4 per 1 000 live births. The facility maternal mortality ratio reflected a slight decrease from 172.4 per 100 000 live births in 2011/12 to 164.1 in 2012/13. This is still well above the national average of 132.9 per 100 000 live birth.

The antenatal 1st visit before 20 weeks rate was 42.1% and has been increasing annually since 2009/10 when it was 33.4%. The 2011 HIV prevalence among antenatal clients tested (according to the 2011 National Antenatal Sero-prevalence Survey) was 33.9%, higher than the provincial prevalence of 30.2% and the national prevalence of 29.5%. This rate has fluctuated considerably in the past four years. The rate of antenatal clients initiated on ART at 62.8% was lower than the 74.7% of the province, the national rate of 81.6% and the target of 85%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage increased slightly from 43.4% in 2011/12 to 48.7% in 2012/13. This was the lowest in the province and well below the national coverage of 73.9%. The infant 1st PCR test positive around 6 weeks rate (DHIS data) was 2.4%, which correlated well with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.5%.

The immunisation coverage under 1 year was 60.9%, which was lower than the provincial coverage of 63.1% for 2011/12. The measles 1st to 2nd dose drop-out rate decreased from 27.9% in 2011/12 to 24.1% in 2012/13. This indicates that many children are still not receiving the second measles vaccination.

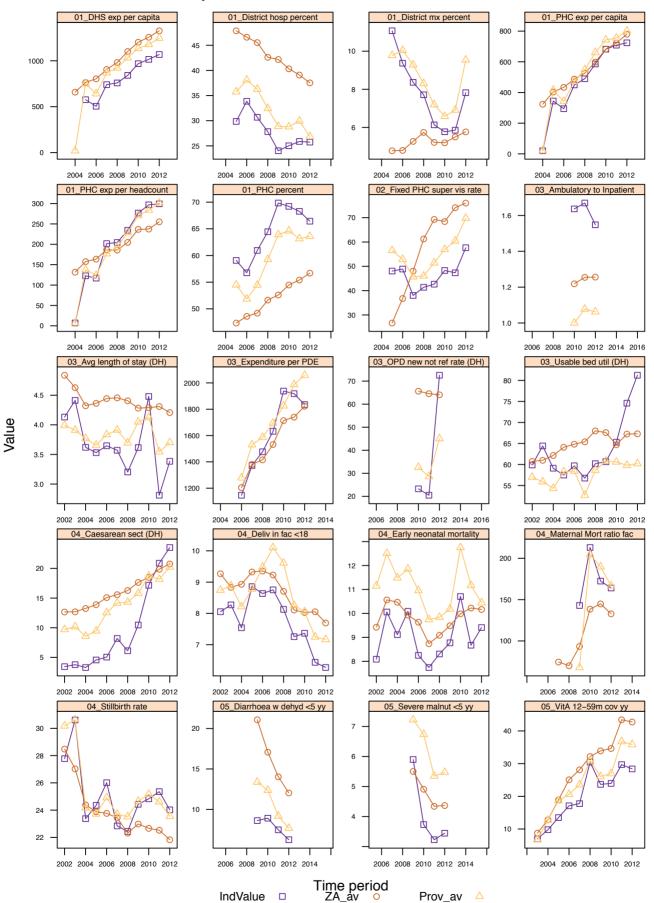
The child under 5 years diarrhoea with dehydration incidence was 6.2 per 1 000 children, and was well below the national incidence of 12.0 per 1 000 children. The child under 5 years diarrhoea case fatality rate was 11.3%, a very large increase from the incidence of 6.9% in 2011/12, and the fourth highest incidence in the country. The child under 5 years pneumonia incidence dropped from 44.0 per 1 000 children in 2011/12 to 28.8 per 1 000 children. This was the lowest in the province and the fifth lowest nationally. The child under 5 years pneumonia case fatality rate was 7.7%, higher than the provincial rate of 5.1%. At 3.4 per 1 000 children, the child under 5 years severe acute malnutrition incidence was the lowest in the province. However, at 17.5%, the child under 5 years severe acute malnutrition case fatality rate was the highest in the province. Therefore, in general, the incidence rates for key childhood illnesses are lower than average, but the case fatality rates are worse than average for this district. The vitamin A coverage in children aged 12 to 59 months was 28.4%, the lowest rate in the province and the third lowest in the country.

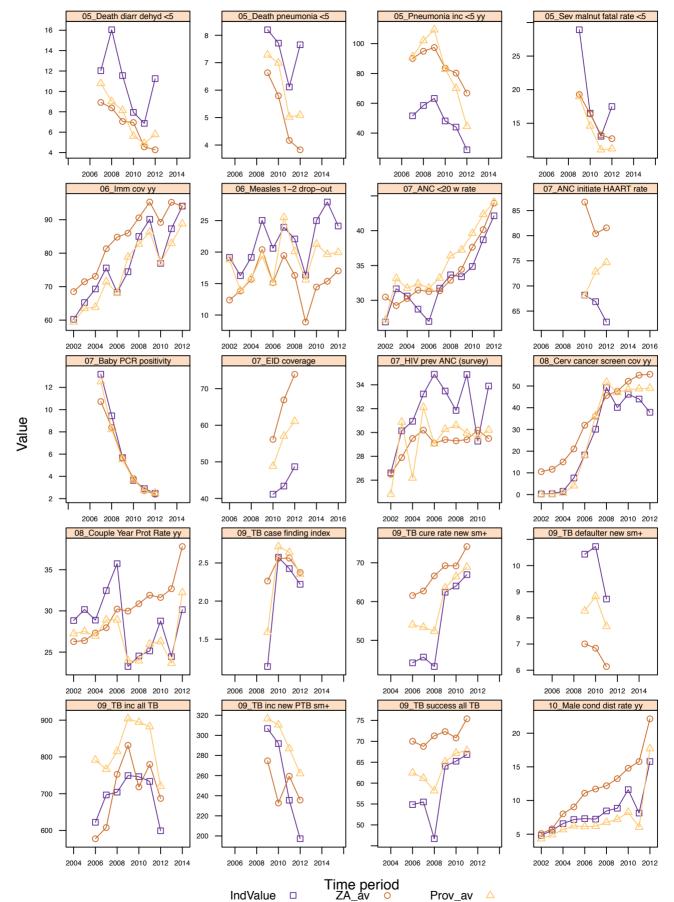
The couple year protection rate increased from 24.4% in 2011/12 to 30.1% in 2012/13. There has been a downward trend in the cervical screening coverage from 49.3% in 2008/09 to 37.9% in 2012/13.

The TB incidence (all cases) was 599.3 per 100 000 people, below the provincial and national averages of 720.2 and 687.3 per 100 000 people respectively. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 3 164 in 2011 to 2 676. TB incidence (new pulmonary smear-positive) was 197.2 per 100 000 people, the lowest incidence in the province and well below the national incidence of 235.7. The TB case finding index was 2.2%. The TB cure rate (new pulmonary smear-positive) increased from 64.0% in 2010 to 66.9% in 2011, but was still below the provincial rate of 68.9% and the national rate of 74.2%. The TB defaulter rate (new pulmonary smear-positive) was 8.7%, the highest rate in the province. The TB successful treatment rate (all TB) was 66.8% and well below the national rate of 75.4%.

The male condom distribution coverage increased from 8.1 condoms per male 15 years and older in 2011/12 to 15.8 condoms in 2012/13. This was, however, below the provincial average of 17.7 and the national average of 22.1 condoms. The total number of adults remaining on ART at the end of the month by the end of 2012/13 was 61 195 and had increased from 41 459 in 2011/12. There were 1 951 children under 15 years remaining on ART at the end of the month by the end of 2012/13, an increase of 172 from the previous year.

### Annual indicators for district: Bojanala: DC37





### Annual indicators for district: Bojanala: DC37

# Ngaka Modiri Molema District Municipality

# Naomi Massyn

Ngaka Modiri Molema District in the North West Province has an estimated medical scheme coverage of 8.1%.

The proportion of district health services expenditure on district management increased from 7.7% in 2011/12 to 9.3% in 2012/13. The proportion of total district expenditure on primary health care (PHC) remained stable at 61.4%, and the percentage expenditure on district hospital services was 29.3%.

At 70.8%, the PHC supervisor visit rate (fixed clinic/CHC/CDC) was below the national average of 76.0%.

The inpatient bed utilisation rate has decreased annually over the past four years, from 60.9% in 2008/09 to 47.6% in 2012/13. This rate was the lowest in the province and well below the national rate of 67.3%. The average length of stay was 3.9 days. At R2 425, the expenditure per patient day equivalent was the highest in the province and well above the national (R1 823) average. The ratio of ambulatory to inpatient days was 0.8, indicating that more patients are admitted as inpatients than are seen at the emergency unit and/or outpatient department. The OPD new client not referred rate was 45.5%, showing that just less than 50% of clients bypass PHC facilities and access hospitals directly.

The delivery by Caesarean section rate was 19.4%, an increase of one percentage point from the previous year. The delivery in facility under 18 years rate was 7.7% and on par with the national rate of 7.7%. The facility maternal mortality ratio was 141.4 per 100 000 live births and the lowest in the province. The stillbirth in facility rate remained stable at 24.3 per 1 000 births, the highest in the province and above the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate decreased from 12.0 per 1 000 live births in 2011/12 to 10.5.

The antenatal 1st visit before 20 weeks rate was 50.2%; this was the best in the province and well above the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows a slight decrease in the HIV prevalence among antenatal clients tested, from 25.9% in 2010 to 24.9% in 2011. The antenatal client initiated on ART rate increased from 76.9% in 2011/12 to 84.5%, and was above the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 135.0%. A value of more than 100% might be due to poor data quality or that babies born in another district are tested in the Ngaka Modiri Molema District. The infant 1st PCR test positive around 6 weeks rate (DHIS data) was 2.7%, a decrease from 4.1% in 2011/12. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.2% was lower than the DHIS value of 2.7%.

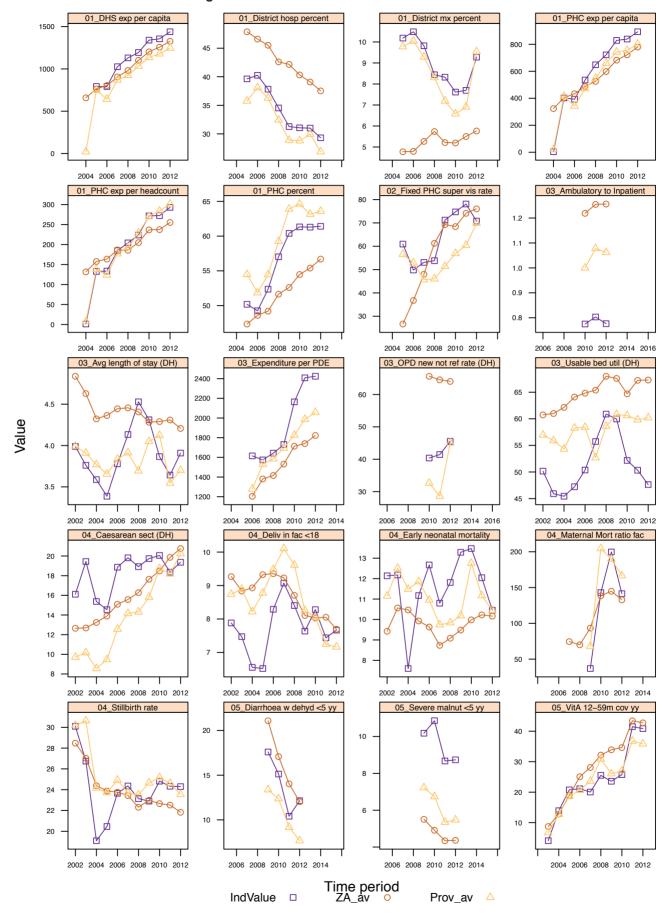
The immunisation coverage under 1 year increased from 77.7% in 2011/12 to 86.7%, in line with the provincial (88.8%) and below the national (94.0%) coverage. At 16.1%, the measles 1st to 2nd dose drop-out rate was the second lowest in the province and below the national rate of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was 12.1 episodes per 1 000 children. The child under 5 years diarrhoea case fatality rate was 4.4%. The child under 5 years pneumonia incidence decreased dramatically from 112.7 cases per 1 000 children in 2011/12 to 68.1 in 2012/13, and was still the highest in the province and above the national (66.8 per 1 000 children) incidence. The child under 5 years pneumonia case fatality rate was also 4.4%, also the highest in the province and above the national rate of 3.8%. At 8.7 cases per 1 000 children, the child under 5 years severe acute malnutrition incidence was the highest in the province and well above the national incidence of 4.4, while the child under 5 years severe acute malnutrition case fatality rate was 9.4%. The vitamin A coverage in children aged 12 to 59 months was 40.9%.

The cervical cancer screening coverage was 44.7%, a decrease from 51.0% in 2011/12 and almost 10 percentage points below the national coverage of 55.4%. The couple year protection rate of 40.3% was the highest in the province; this was above the national rate of 37.8% and almost double the rate of 22.3% in 2011/12, primarily due to a huge increase in male condom distribution.

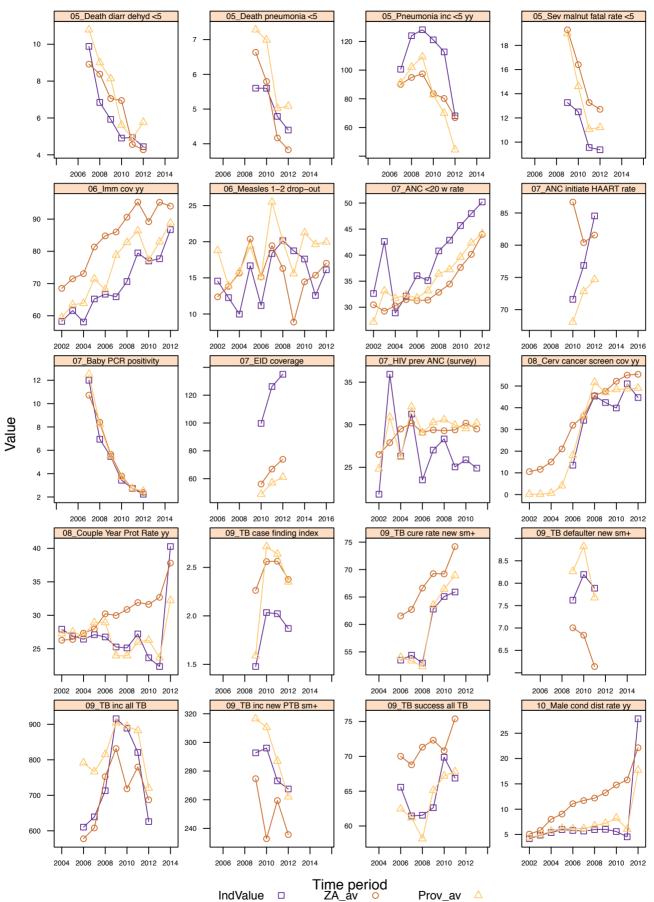
The TB incidence (all cases) was 625.9 per 100 000 people and was below the provincial and national averages of 720.2 and 687.3 per 100 000 people respectively. The TB case finding index was 1.9% and the lowest in the province. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 181 in 2011 to 2 140, and the TB incidence (new pulmonary smear-positive) decreased from 273.2 per 100 000 people to 267.5, but it was still above the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 65.9%, the lowest rate in the province. The TB defaulter rate (new pulmonary smear-positive) was 7.9%, a slight decrease from 8.2% in 2010 but above the national rate of 6.1%, and the TB treatment success rate (all TB) was 66.9%.

The male condom distribution coverage was 27.9 condoms per male 15 years and older, a significant increase from 4.5 in 2011/12. This was above the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 25 627 by the end of 2011/12 to 30 580 at the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 1 779 to 1 951 in the same period.



### Annual indicators for district: Ngaka Modiri Molema: DC38

### Annual indicators for district: Ngaka Modiri Molema: DC38



# Ruth Segomotsi Mompati District Municipality

# Nandy Mothupi

Ruth Segomotsi Mompati District in the North West Province borders on Botswana in the north. The proportion of the population with medical scheme coverage was estimated at 6.2%.

The proportion of the district health services expenditure on district management was 10.0%. The percentage expenditure on district hospital services was 32.7% and decreased by 10.1 percentage points from 2011/12, whereas the proportion of total district expenditure on primary health care (PHC) increased from 50.0% in 2011/12 to 57.3% in 2012/13, but was the lowest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) showed commendable improvement with an increase from 57.4% in 2011/12 to 93.2% in 2012/13, higher than the national average of 76.0%.

The inpatient bed utilisation rate was 57.3% in 2011/12 and has decreased to 55.8% in 2012/13. This is the lowest rate since 2008/09. The average length of stay (ALOS) was 4.1 days and longer than the provincial length of stay of 3.7 days. The ALOS remained more than four days and has been the highest provincially since 2009/10. The expenditure per patient day equivalent was R2 011 and higher than the national average of R1 823. The ratio of ambulatory to patient days was 1.0, slightly below the national ratio of 1.3. The OPD new client not referred rate was 6.6% and dropped from 25.7% in 2011/12. This indicates that a relatively lower percentage of clients bypass PHC facilities and access district hospitals directly.

The delivery in facilities by women under 18 years was 9.3% in 2011/12 and increased minimally to 9.7% in 2012/13. This was the highest in the province. The rate of delivery by Caesarean section was 22.0%. The stillbirth rate was 23.3 per 1 000 births and the inpatient early neonatal death rate 8.0 per 1 000 live births. The facility maternal mortality ratio reflected an increase from 123.3 per 100 000 live births in 2011/12 to 142.9 per 100 000 live births in 2012/13, and was well above the national ratio of 132.9 per 100 000 live births.

The antenatal 1st visit before 20 weeks rate was 47.2% and higher than the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows a decrease in the HIV prevalence among antenatal clients, from 24.5% in 2010 to 20.5% in 2011, and was the lowest in the province. The antenatal client initiated on ART rate of 83.5% was higher than the provincial value of 74.7% and higher than the national average of 81.6% for 2012/13.

The early infant HIV diagnosis coverage (NHLS data) was 53.6% and the proportion of infants who were HIV-positive under two months was 2.4%. The NHLS data showed one percentage point higher than the DHIS percentage of babies that tested PCR-positive six weeks after birth of 3.4%.

The immunisation coverage under 1 year was 98.9% in 2011/12, increasing to 108.3% in 2012/13 – although immunisation rates above 100% suggest poor data quality or incorrect catchment population figures. The measles 1st to 2nd dose drop-out rate increased from 12.6% in 2011/12 to 16.0% in 2012/13, although this was the lowest provincially.

The child under 5 years diarrhoea with dehydration incidence was 5.5 episodes per 1 000 children. The child under 5 years diarrhoea case fatality rate was 2.7%. The child under 5 years pneumonia incidence decreased from 74.3 cases per 1 000 children in 2011/12 to 47.0 in 2012/13. The child under 5 years pneumonia case fatality rate was 3.8%, the lowest in the province and on par with the national rate of 3.8%. The child under 5 years severe acute malnutrition incidence was 3.5 cases per 1 000 children. The child under 5 years severe acute malnutrition case fatality rate was 12.7% and on par with the national rate of 12.7%. At 51.5%, the vitamin A coverage for children aged 12 to 59 months was the highest in the province and well above the national rate of 42.8%.

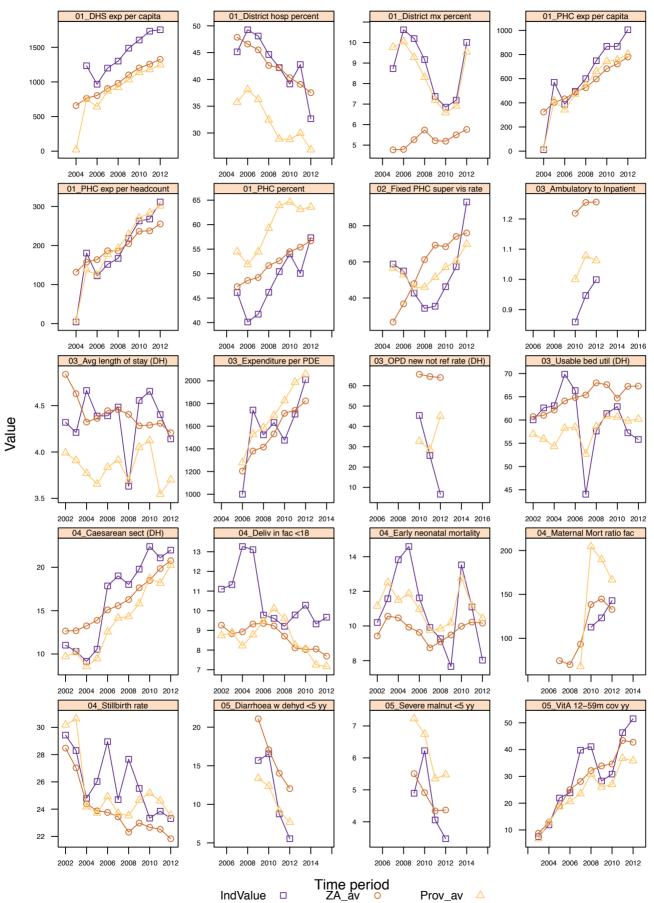
The couple year protection rate increased from 28.7% in 2011/12 to 34.2% in 2012/13. The cervical cancer screening coverage increased from 70.1% in 2011/12 to 83.6% in 2012/13. This was the highest in the province and the fifth highest in the country.

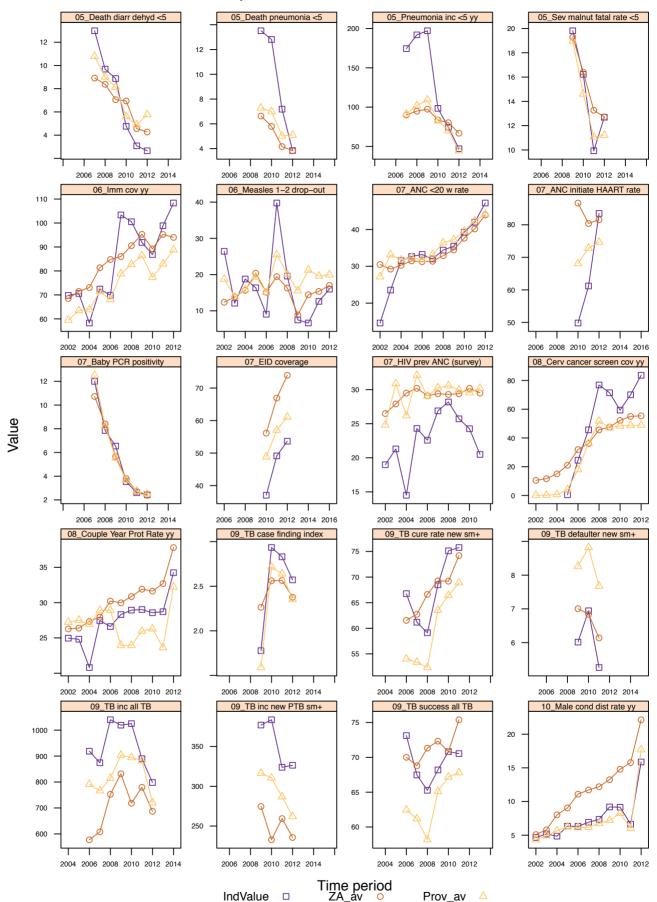
The TB incidence (all cases) was 798.3 per 100 000 people and decreased annually from 2010 when it was 1 025.1. However, it was above the national average of 687.3 per 100 000 people. The TB case finding index was 2.6%. The number of cases diagnosed with TB (new pulmonary smear-positive) increased slightly from 1 478 in 2011 to 1 491, and the TB incidence (new pulmonary smear-positive) increased from 323.9 per 100 000 to 326.5 and was above the national incidence of 235.7. The TB (new pulmonary smear-positive) cure rate was 75.8%, the highest rate in the province. The new TB (new pulmonary smear-positive) smear-positive) defaulter rate was 5.3%, the lowest in the province, and the TB treatment success rate (all TB) was also the highest provincially at 70.5%.

The male condom distribution coverage increased from 6.6 condoms per year per male 15 years and older in 2011/12 to 15.9 in 2012/13, but was still below the national coverage of 22.1 condoms.

The total number of adults remaining on ART at the end of the month increased from 8 299 at the end of 2011/12 to 13 559 by the end of 2012/13, and the total number of children under 15 years remaining on ART at the end of the month increased from 94 to 294 in the same period.

### Annual indicators for district: RS Mompati: DC39





### Annual indicators for district: RS Mompati: DC39

# Dr Kenneth Kaunda District Municipality

# Susan Naude

Dr Kenneth Kaunda District in North West Province has an estimated medical scheme coverage of 23.7%, the highest in the province. The district is also one of the 11 National Health Insurance (NHI) pilot districts.

The proportion of total district expenditure on district management at 12.8% was the second highest in the country and the highest of all the NHI districts. The percentage expenditure on district hospital services was 17.9%, the lowest in the province, second lowest among the NHI districts, and way below the national average of 30.4%. However, the district has only two district hospitals compared to the other districts in the province where there are more hospitals. The proportion of district health services expenditure on primary health care (PHC) was 69.3%, the highest in the province and above the national average of 56.7%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) increased from 62.5% in 2011/12 to 68.8% in 2012/13, but it is still below the national average of 76.0%.

In terms of inpatient facility care, the inpatient bed utilisation rate was 74.6%. The average length of stay of 3.2 days was just shorter than the national target of 3.5 days and shorter than the average of 4.2 days for all district hospitals in the country. The expenditure per patient day equivalent of R1 987 was just above the national average of R1 823. The ratio of ambulatory to inpatient days was 0.7, the fourth lowest in the country, the lowest among the NHI districts, and below the national average of 1.3. This indicates that more patients are admitted as inpatients than are seen at the emergency unit and/or outpatient department. The OPD new client (not referred) rate was the lowest in the country at 6.1%, and far below the national average of 64.1%. This had dropped from 8.7% in 2011/12, and indicates that a low percentage of clients bypass the PHC services.<sup>a</sup>

The delivery in facility under 18 years rate was 6.2%, and was the second lowest of all NHI districts. At 12.4%, the delivery by Caesarean section rate was the lowest in the province and the second lowest among the NHI districts, whereas the norm for district hospitals in South Africa should be around 15%. More than half of the deliveries in this district take place in regional hospitals, where the Caesarean section rate was 39.6%. The stillbirth in facility rate has decreased over the past four years from 26.8 per 1 000 births to 21.9 per 1 000 births, and was the lowest in the North West Province. The inpatient early neonatal death rate was 14.0 per 1 000 live births, being above the national average of 10.2 per 1 000 live births, the highest in the province as well as the second highest among the NHI districts. The facility maternal mortality ratio was 222.3 per 100 000 live births, the highest in the province, second highest among the NHI districts, and well above the national average of 132.9 per 100 000 live births.

The antenatal 1st visit before 20 weeks rate of 39.3% was the lowest in the province and lower than the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows a one percentage point decrease in the HIV prevalence among antenatal clients tested, from 37.0% in 2010 to 36.0% in 2011. However, it was still the highest provincially. The antenatal client initiated on ART rate was 89.3%, which was above the national rate of 81.6%.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 60.3%. This was the second lowest coverage among the NHI districts. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.9% was lower than the DHIS value of 3.5% for infant 1st PCR test positive around 6 weeks rate.

The immunisation coverage under 1 year at 69.6% in 2012/13 was the lowest in the country. The measles 1st to 2nd dose drop-out rate was 19.3% and was above the national rate of 17.0%.

The child under 5 year diarrhoea with dehydration incidence of 6.2 episodes per 1 000 children was well below the national average of 12.0 per 1 000 children, and was also the lowest among the NHI districts. The child under 5 year diarrhoea case fatality rate showed an increase from 4.3% in 2011/12 to 7.0% in 2012/13, and was above the national average of 4.3%. The child under 5 year pneumonia incidence was 41.7 cases per 1 000 children in Dr Kenneth Kaunda District, better than the national average of 66.9. This had decreased from 99.7 per 1 000 children in 2009/10. The child under 5 years pneumonia case fatality rate was 4.5%. The child under 5 years severe acute malnutrition incidence was 6.5 cases per 1 000 children, while the child under 5 years severe acute malnutrition case fatality rate of 8.7% was the lowest in the province and also lower than the national average of 12.7%. The vitamin A coverage for children aged 12 to 59 months was 31.7%.

The district underperformed in the couple year protection rate. The national target is 35% with a national average of 37.8% against the 26.9% of this district; however, it did increase by 6.1 percentage points from 2011/12. This was the second lowest performance of the NHI districts. The cervical cancer screening coverage was 55.2%, an increase of 10 percentage points over the past year and in line with the national coverage of 55.4%.

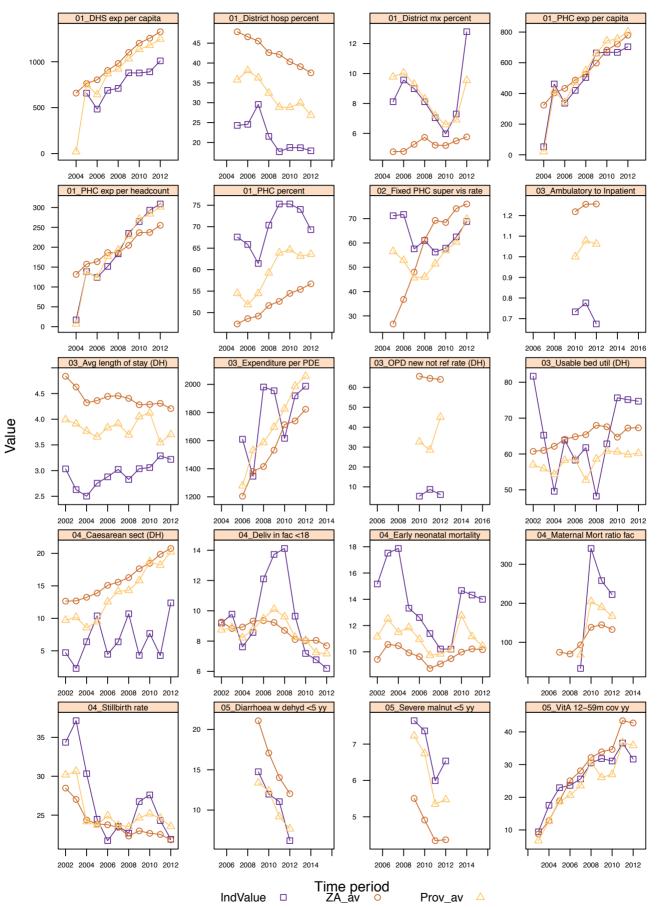
The TB incidence (all cases) was 936.7 per 100 000 people. This was the highest in the province and above the national average of 687.3 per 100 000 people. The TB case finding index was 3.2% and was the highest in the province. The number of

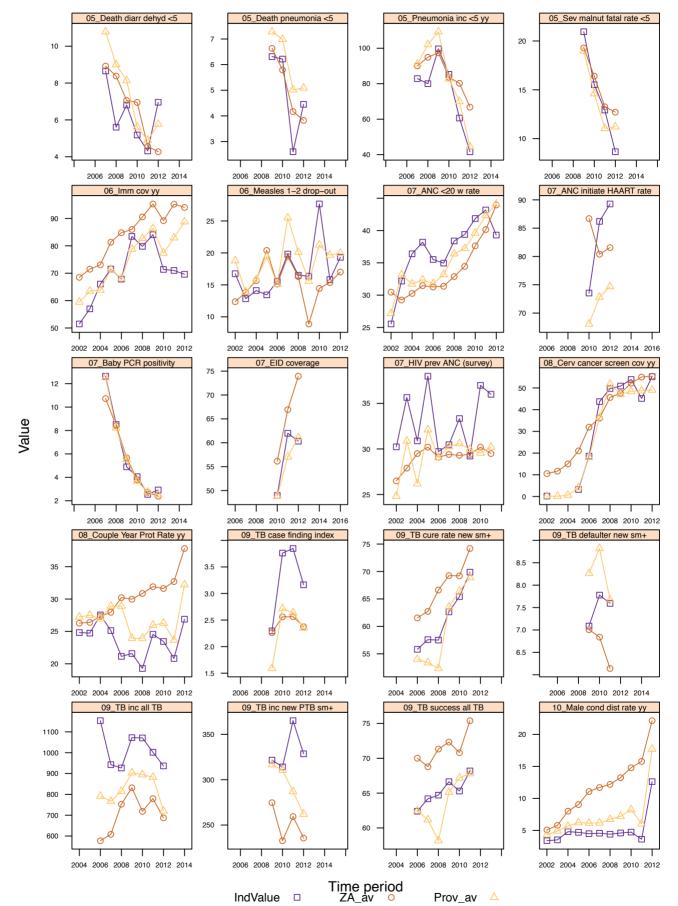
a There is no obvious data quality problem, although the rate is almost zero in Nic Bodenstein Hospital, but between 25 and 60% in Ventersdorp Hospital.

cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 947 in 2011 to 2 670, and the TB incidence (new pulmonary smear-positive) decreased from 365.1 per 100 000 people to 328.6, but it was above the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) was 69.9%. The TB defaulter rate (new pulmonary smear-positive) was 7.6%, being above the national rate of 6.1%, and also the second highest among the NHI districts. The TB treatment success rate (all TB) at 68.2% was the second lowest rate among the NHI districts.

There was an increase in male condom distribution coverage from 3.6 condoms per male 15 years and older in 2011/12 to 12.6, but this was still below the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month decreased from 39 673 at the end of 2011/12 to 32 955. Dr Kenneth Kaunda District was the only district in the province with a decrease in this number. The total number of children under 15 years remaining on ART at end of the month increased from 2 572 to 3 028 to in the same period.

### Annual indicators for district: Kenneth Kaunda: DC40





### Annual indicators for district: Kenneth Kaunda: DC40

# 20 Western Cape Province

# **Cape Town Metropolitan Municipality**

The Cape Town Metropolitan District lies in the south-western corner of the Western Cape Province and has an estimated medical scheme coverage of 27.1%. It is worth noting that 64% of the province's population is in this metro, and therefore the provincial average for most indicators tends to mirror the performance of Cape Town.

The proportion of district health services (DHS) expenditure on district management was 3.9%, the lowest in the province and less than the national average of 5.8%. DHS expenditure on district hospitals was 37.3%, with the proportion of total district expenditure on primary health care (PHC) at 58.7%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) has increased steadily since 2006/07, from 35.2% to 59.9% in 2012/13. This was the lowest rate in the province and it was also lower than the national average of 76.0%.

The inpatient bed utilisation rate was 94.3%, the highest in the country. The average length of stay of 3.5 days was the longest in the province but shorter than the national average of 4.2 days. This district had the highest expenditure per patient day equivalent in the province at R1 857, but this was in line with the national average of R1 823. The significant increases in certain years primarily reflect the reclassification of facilities as district hospitals, rather than radical shifts in expenditure by existing district hospitals. The ratio of ambulatory to inpatient days at 0.9 was the lowest provincially, and indicates that more patients are admitted as inpatients than are seen at the emergency units and/or the outpatient departments. No data are available for the OPD new client not referred rate in Western Cape districts.

The delivery by Caesarean section rate was 30.4%, the highest in the province and sixth highest in the country. The delivery in facility under 18 years rate of 5.4% was the lowest provincially and fourth lowest nationally. The maternal mortality in facility ratio was 30.7 per 100 000 live births in 2011/12, dropping to 6.4 per 100 000 live births in 2012/13. The stillbirth in facility rate was 17.5 per 1 000 births and the inpatient early neonatal death rate was 5.9 per 1 000 live births.

The antenatal 1st visit before 20 weeks rate was 51.5%, and was the lowest in the province, but still higher than the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows HIV prevalence among antenatal clients tested as being 19.8%, the second highest provincially. The antenatal client initiated on ART rate was 94.7%. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 73.8%, which was the second lowest in the province and on par with the national coverage of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age rate (NHLS data) was 1.8%. This was in line with the 1.5% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data).

The immunisation coverage under 1 year was 91.7%, the highest provincially but just below the national average of 94.0%. The measles 1st to 2nd dose drop-out rate at 23.9% was the third highest provincially and the fifth highest in the country.

The child under 5 years diarrhoea with dehydration incidence was 14.1 episodes per 1 000 children, and the incidence of pneumonia in children under 5 was 70.7 cases per 1 000 children, which is above the national average of 66.8 per 1 000 children. The under 5 diarrhoea case fatality rate was 0.1% and well below the national average of 4.3%. This district was one of three districts in the province with a rate of 0.1%, and one of six districts nationally with a rate lower than 1% (all six districts being in the Western Cape). The child under 5 years severe acute malnutrition incidence, at 3.0 cases per 1 000 children, was the second highest in the province but below the national average of 4.4 per 1 000 children. No data are available in Western Cape districts for the child under 5 years pneumonia or severe acute malnutrition case fatality rates in 2012/13. The Vitamin A coverage in children aged 12 to 59 months has increased steadily since 2008/09, from 26.5% to 32.5% in 2012/13. However, this rate is the still the lowest in the province and also lower than the national average of 42.8%.

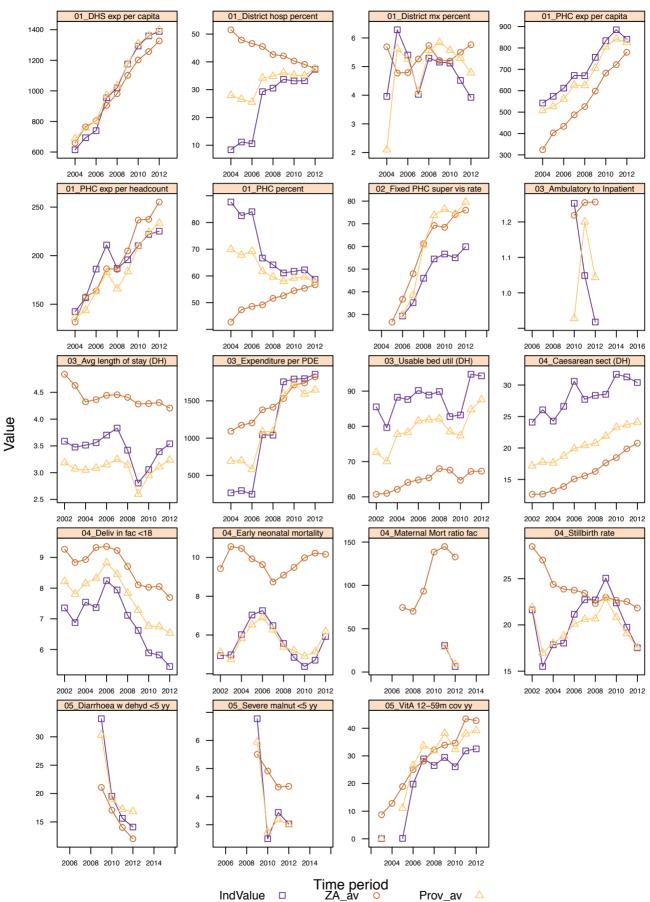
The couple year protection rate was 72.2%, the second highest both provincially and nationally. Male condom distribution contributes about 68% of the couple years of protection to this composite indicator. The cervical cancer screening coverage was 54.3%, the lowest in the province and just below the national average of 55.4%.

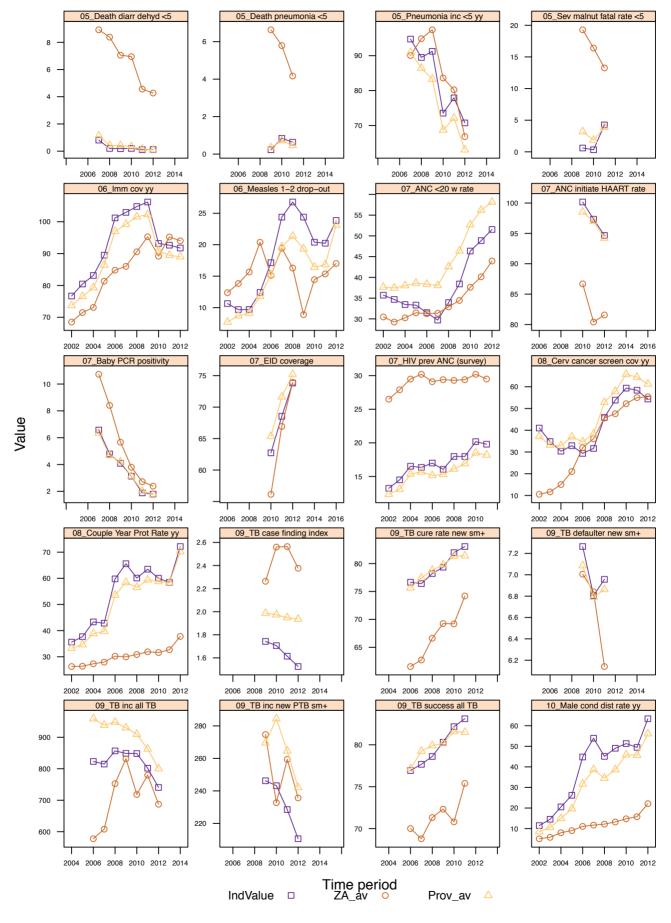
The TB incidence (all cases) was 740.6 per 100 000 people. This was the lowest provincially and lower than the provincial average of 800.0 but higher than the national average of 687.3 per 100 000 people. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 8 165 in 2011 to 7 644. TB incidence (new pulmonary smear-positive) was 210.6 per 100 000 people, the lowest provincially and below the national incidence of 235.7. The TB case finding index was 1.5%, the lowest in the province and below the national average of 2.4%. The TB cure rate (new pulmonary smear-positive) at 83.1% in 2011 was the highest in the province and well above the national rate of 74.2%. The TB (new pulmonary smear-positive) defaulter rate was 7.0%, slightly higher than the national rate of 6.1%, and the TB treatment success rate (all TB) of 83.1% was also well above the national rate of 75.4%.

# Janis Paulsen

The male condom distribution coverage was 63.4 condoms per male 15 years and older, the highest in the province and third highest in the country. The total number of adults remaining on ART at the end of the month increased from 63 699 at the end of 2010/11 to 93 930 by the end of 2012/13, and this total was the sixth highest in the country. The total number of children under 15 years remaining on ART at end of the month increased from 3 869 to 5 437 in the same period.

### Annual indicators for district: Cape Town: CPT





### Annual indicators for district: Cape Town: CPT

# West Coast District Municipality

# Janis Paulsen

The West Coast District is located along the western coastline of the Western Cape Province and has an estimated medical scheme coverage of 29.0%, the highest in the province and third highest in the country.

The proportion of district health services expenditure on district management was 4.6%, the second lowest in the province. District health services expenditure on district hospitals was 49.9%, the highest in the province, with the proportion spent on primary health care (PHC) at 45.5%, the lowest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 95.8%, the third highest in the province and sixth highest in the country.

The inpatient bed utilisation rate was 83.7%, the second highest provincially and fifth highest in the country. The average length of stay was 2.9 days. The expenditure per patient day equivalent was R1 298, the lowest in the province and the second lowest nationally. The ratio of ambulatory to inpatient days was 1.3, the same as the national average. This indicates that the number of patients seen at the emergency/OPD units was higher than the number of patients admitted as inpatients. No data are available for the OPD new client not referred rate in the Western Cape.

The delivery by Caesarean section rate was 16.3%, the lowest in the province and below the national average of 20.8%. The delivery in facility under 18 years rate of 9.1% was above the national average of 7.7%. The maternal mortality in facility ratio was 62.3 per 100 000 live births. The stillbirth in facility rate was 15.3 per 1 000 births, being the lowest in the province and the fourth lowest nationally. Similarly, the inpatient early neonatal death rate was the lowest provincially at 4.6 per 1 000 live births, and was also the third lowest nationally.

The antenatal 1st visit before 20 weeks rate was 69.9%. This is the fourth highest in the country and well above the national average of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows an HIV prevalence among antenatal clients tested of 9.9%, the lowest provincially and second lowest nationally. The antenatal client initiated on ART rate was 86.3% and the lowest in the province. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 86.9% which was the second highest in the province and well above the national rate of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 1.7% was the second lowest provincially. This was also well below the 3.3% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data), which was the highest in the province.

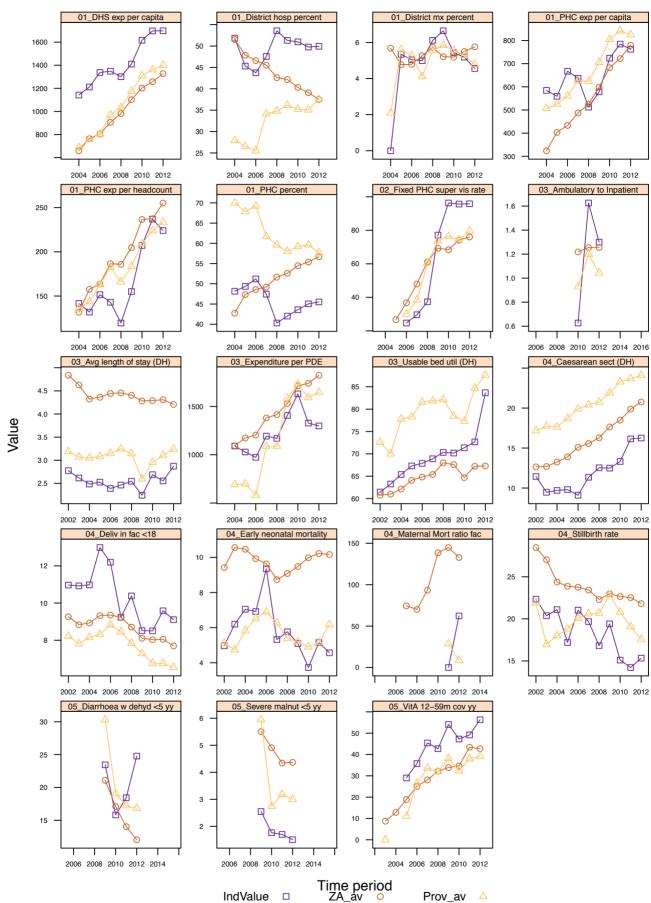
The immunisation coverage under 1 year was 90.1%, slightly below the national average of 94%. The measles 1st to 2nd dose drop-out rate was 17.2%.

The child under 5 years diarrhoea with dehydration incidence was 24.8 episodes per 1 000 children, which was the second highest in the province and just over twice the national average (12.0 per 1 000 children). The child under 5 diarrhoea case fatality rate was 0.1%. The West Coast was one of the three districts provincially with a rate of 0.1% and one of the six districts nationally with a rate lower than 1.0% (all six districts being in the Western Cape). The child under 5 years pneumonia incidence was 36.4 cases per 1 000 children, the second lowest in the province and well below the national average of 66.8 per 1 000 children. Pneumonia incidence has decreased steadily since 2007/08, from a value of 60.0 per 1 000 children. The child under 5 years severe acute malnutrition incidence was 1.5 cases per 1 000 children, the lowest in the province and the third lowest in the country. No data are available in Western Cape districts for the child under 5 years pneumonia or severe acute malnutrition case fatality rates in 2012/13. The vitamin A coverage in children aged 12 to 59 months was 56.3%. This has increased since 2010/11 when it was 47.3%, and was the highest coverage provincially as well as the third highest nationally.

The couple year protection rate was 67.1%, the third highest both provincially and nationally. The cervical cancer screening coverage was 63.3%, above the national average of 55.4%.

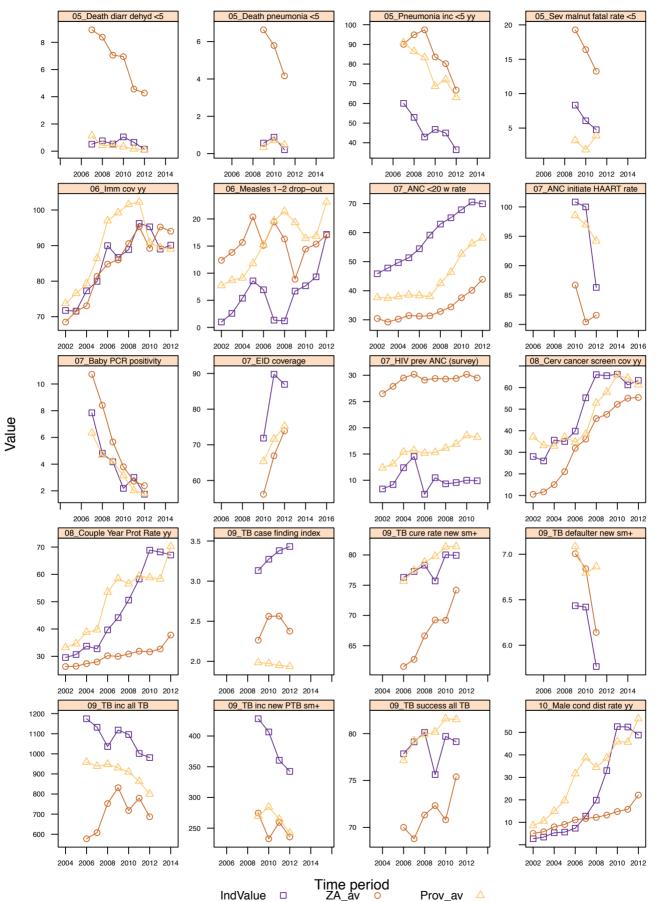
The TB incidence (all cases) was 981.3 per 100 000 people, being the highest provincially and above the provincial and national averages of 800.0 and 687.3 per 100 000 people respectively. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 254 in 2011 to 1 210. TB incidence (new pulmonary smear-positive) was 342.4 per 100 000 people, the second highest provincially and well above the national incidence of 235.7. The TB case finding index was 3.4%, the highest in the province and above the national average of 2.4%. The TB cure rate (new pulmonary smear-positive) was 79.9% in 2011 and just below the provincial rate of 81.4%. The TB defaulter rate (new pulmonary smear-positive) was 5.8%, lower than the provincial rate of 6.9%. The TB treatment success rate (all TB) was 79.1%.

The male condom distribution coverage was 48.8 condoms per male 15 years and older, the fourth highest nationally and well above the national average of 22.1 condoms. The total number of adults remaining on ART at the end of the month increased from 2 868 to 3 591 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month increased from 187 to 209 in the same period.



### Annual indicators for district: West Coast: DC1

### Annual indicators for district: West Coast: DC1



# **Cape Winelands District Municipality**

# Janis Paulsen

The Cape Winelands District is located in the Boland region of the Western Cape Province. The proportion of the population with medical scheme coverage is estimated to be 25.2%.

The proportion of district health services (DHS) expenditure on district management was 8.8%, and this was the highest in the province and higher than the national average of 5.8%. The district spent 25.5% of the DHS budget on district hospitals, the lowest in the province, and the proportion of total district expenditure on primary health care (PHC) was 65.7%, the highest in the province.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 101.2%. A value above 100% suggests data quality problems.<sup>a</sup>

The inpatient bed utilisation rate was 78.4%, higher than the national average of 67.3% but lower than the provincial average of 87.6%. The average length of stay was 2.9 days, shorter than both the provincial and national averages of 3.2 and 4.2 days respectively. The expenditure per patient day equivalent was R1 382, below the provincial average of R1 647 and the national average of R1 823. The ratio of ambulatory to inpatient days was 1.2, meaning that slightly more clients are seen at the emergency unit/OPD clinics than are admitted to hospital. No data are available for the OPD new client not referred rate in Western Cape districts.

The delivery by Caesarean section rate was 19.5%, just below the provincial and national averages of 24.1% and 20.8%, respectively. The delivery in facility under 18 years rate was 9.5%. This was above the provincial average of 6.5% and the national rate of 7.7%. The maternal mortality in facility ratio was zero per 100 000 live births. This might be due to no maternal deaths having occurred, or that the district did not submit data for this indicator. The stillbirth in facility rate was 16.2 per 1 000 births, the sixth lowest in the country. The inpatient early neonatal death rate was 5.7 per 1 000 live births, the sixth lowest maternal average of 6.2 per 1 000 live births.

The antenatal 1st visit rate before 20 weeks rate was 68.5%, the fifth highest in the country. The 2011 National Antenatal Sero-prevalence Survey shows HIV prevalence among antenatal clients tested of 15.7%. The antenatal client initiated on ART rate was 98.7%, the third highest in the country and second highest in the province. Data from the National Health Laboratory Services (NHLS) showed an early infant HIV diagnosis coverage of 77.6%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 2.0% was the highest provincially; however, this was lower than the 2.4% value of the infant 1st PCR test positive around 6 weeks rate (DHIS data), which was the second highest in the province.

The immunisation coverage under 1 year was 82.6% and decreased annually since 2009/10 when it was 100.9%. This was below the provincial (89.0%) and national (94.0%) coverage. The measles 1st to 2nd dose drop-out rate was 25.9%, the highest in the province and second highest in the country.

The child under 5 years diarrhoea with dehydration incidence was 32.9 episodes per 1 000 children, the highest in the country, with a national average of 12.0 episodes per 1 000 children. The child under 5 years diarrhoea case fatality rate was 0.1%. The Cape Winelands District is one of the three districts provincially with a rate of 0.1% and one of the six districts nationally with a rate lower than 1% (all six districts being in the Western Cape). The child under 5 years pneumonia incidence was 50.6 cases per 1 000 children. This is lower than both the provincial and national averages of 63.0 and 66.8 per 1000 children, respectively. The child under 5 years severe acute malnutrition incidence was 2.8 cases per 1 000 children, also lower than the provincial (3.0) and national (4.4) averages. No data are available in Western Cape districts for child under 5 years pneumonia or severe acute malnutrition case fatality rates in 2012/13. The vitamin A coverage in children aged 12 to 59 months increased from 42.8% in 2010/11 to 47.9% in 2012/13.

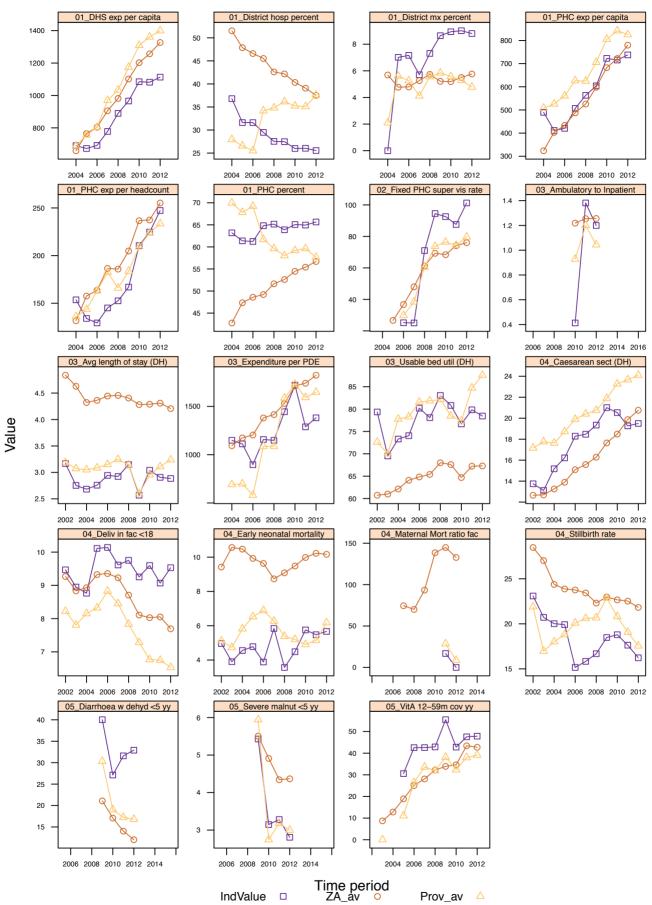
The couple year protection rate was 63.9%, the fourth highest provincially and sixth highest nationally. The cervical cancer screening coverage was 66.9%, higher than both the provincial and national averages of 61.3% and 55.4%, respectively.

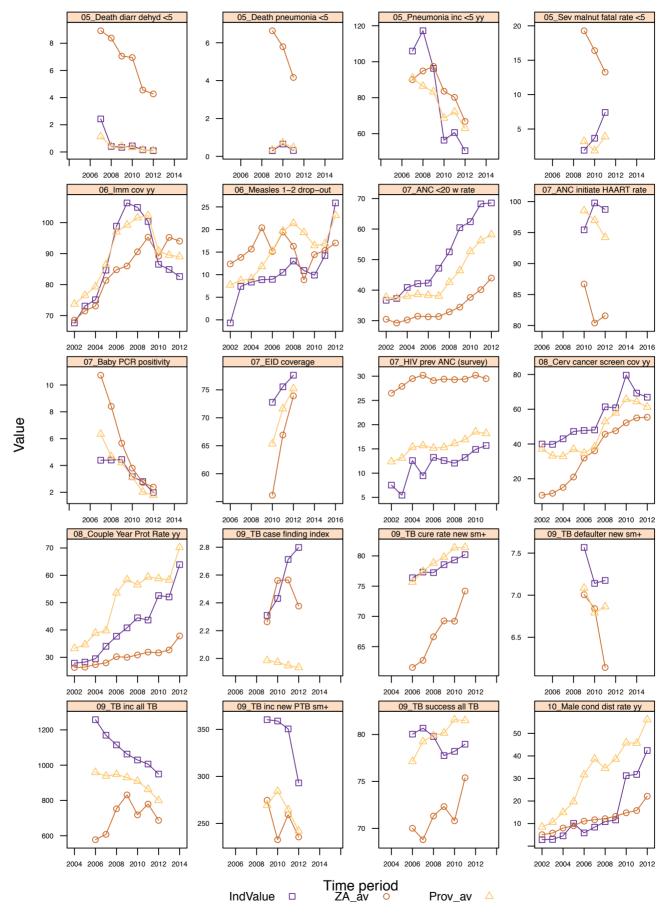
The TB incidence (all cases) was 949.6 per 100 000 people. It was the second highest provincially and above the provincial and national averages of 800.0 and 687.3 per 100 000 people respectively. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 2 643 in 2011 to 2 242, and the TB incidence (new pulmonary smear-positive) was 293.1 per 100 000 people and above the national incidence of 235.7. The TB case finding index was 2.8%, above the national average of 2.4%. The TB cure rate (new pulmonary smear-positive) was 80.2% in 2011 and just below the provincial rate of 81.4%. The TB defaulter rate (new pulmonary smear-positive) was 7.2%, higher than the provincial rate of 6.9%, and the TB treatment success rate (all TB) was 79.0%.

The male condom distribution coverage was 42.4 per male 15 years and older, and nearly twice the national average of 22.1. The total number of adults remaining on ART at the end of the month increased from 8 964 at the end of 2010/11 to 13 263 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month increased from 762 to 842 in the same period.

a It appears that the count of facilities in the system may be incorrect, since there are a few missed supervisory visits for some facilities, and one facility that is not counted in the denominator, possibly because it is indicated as closed in 2002 in the DHIS.

### Annual indicators for district: Cape Winelands: DC2





### Annual indicators for district: Cape Winelands: DC2

# **Overberg District Municipality**

# Naomi Massyn

The Overberg District in the Western Cape Province has an estimated medical scheme coverage of 20.3%.

The proportion of district health services expenditure on district management decreased from 6.2% in 2011/12 to 5.2% in 2012/13. The proportion of total district expenditure on primary health care (PHC) remained stable and was 55.0%. The percentage expenditure on district hospital services increased slightly from 37.5% to 39.7%.

At 93.8%, the PHC supervisor visit rate (fixed clinic/CHC/CDC) was above the provincial rate of 79.6% and the national average of 76.0%.

The inpatient bed utilisation rate increased from 74.3% in 2011/12 to 78.7% in 2012/13 and was well above the national rate of 67.3%. The average length of stay has remained stable at 2.7 days for the past three years. The expenditure per patient day equivalent was R1 660, and was lower than the provincial (R1 647) and national (R1 823) averages. The ratio of ambulatory to inpatient days was 1.1, meaning that an almost equal number of clients are seen at the emergency unit/ OPD clinics as are admitted to hospital. No data are available for the OPD new client not referred rate in the Western Cape districts.

The delivery by Caesarean section rate was 22.0% and the highest of the rural districts in the province. The delivery in facility under 18 years rate was 8.0% and slightly above the national rate of 7.7%. The facility maternal mortality ratio was zero per 100 000 live births. This might be due to no maternal deaths having occurred, or that the district did not submit data for this indicator. The stillbirth in facility rate increased from 12.5 per 1 000 births in 2011/12 to 15.6 per 1 000 births, and was the second lowest in the province, as well as below the national rate of 21.8 per 1 000 births. The inpatient early neonatal death rate increased from 5.6 per 1 000 live births to 8.4 in the same period.

The antenatal 1st visit before 20 weeks rate remained stable at 71.9%; this was the second best in the province and well above the national rate of 44.0%. The 2011 National Antenatal Sero-prevalence Survey shows an increase in the HIV prevalence among antenatal clients tested, from 17.3% in 2010 to 21.4% in 2011. The antenatal client initiated on ART rate increased from 95.7% in 2011/12 to 97.8% in 2012/13, being well above the national rate of 81.6% and the fourth best ranking in the country.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 77.9%, a decrease from 83.9% in 2011/12. The infant 1st PCR test positive around 6 weeks rate (DHIS data) was 1.9%, a decrease from 2.1% in 2011/12 and on par with the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) of 1.9%.

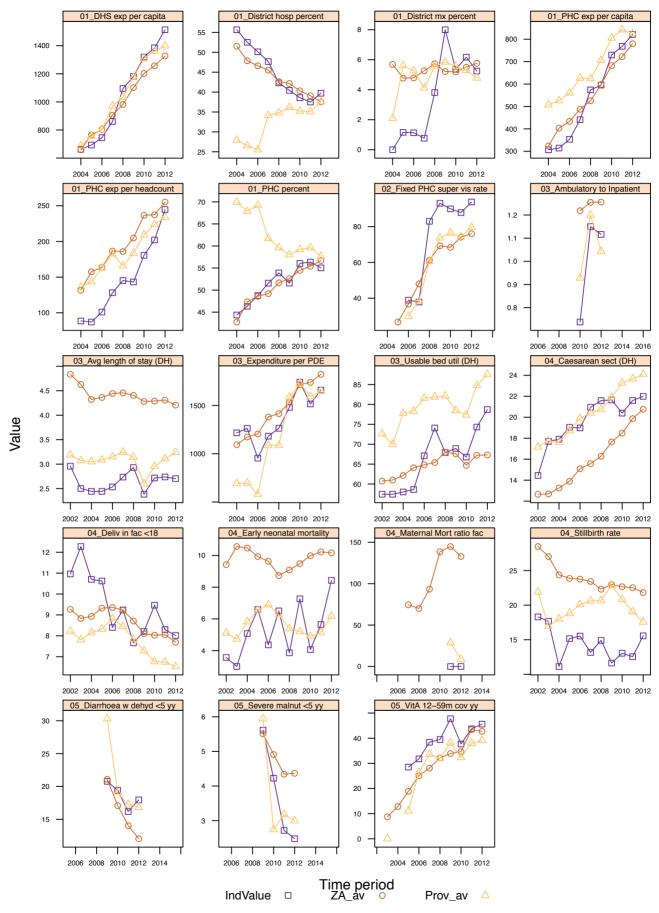
The immunisation coverage under 1 year increased from 75.1% in 2011/12 to 82.5%, but was well below the provincial (89.0%) and national (94.0%) coverage. At 24.6%, the measles 1st to 2nd dose drop-out rate was the second highest in the province and well above the national rate of 17.0%.

The child under 5 years diarrhoea with dehydration incidence was 18.0 episodes per 1 000 children. The child under 5 years diarrhoea case fatality rate was 0% and the Overberg District was one of three districts in the country with zero values. The child under 5 years pneumonia incidence decreased from 182.1 cases per 1 000 children to 123.9 but was, however, well above the provincial (63.0 per 1 000 children) and national (66.8 per 1 000 children) incidences, as well as the seventh highest in the country. At 2.5 per 1 000 children, the child under 5 years severe acute malnutrition incidence was the second lowest in the province and decreased from 2.7 per 1 000 children in 2011/12. No data are available in the Western Cape for child under 5 years severe acute malnutrition or pneumonia case fatality rates in 2012/13. The vitamin A coverage in children aged 12 to 59 months was 45.6%, the second lowest in the province.

The cervical cancer screening coverage was 55.3% and on par with the national coverage of 55.4%. The couple year protection rate of 62.4% was the second lowest in the province but well above the national rate of 37.8%.

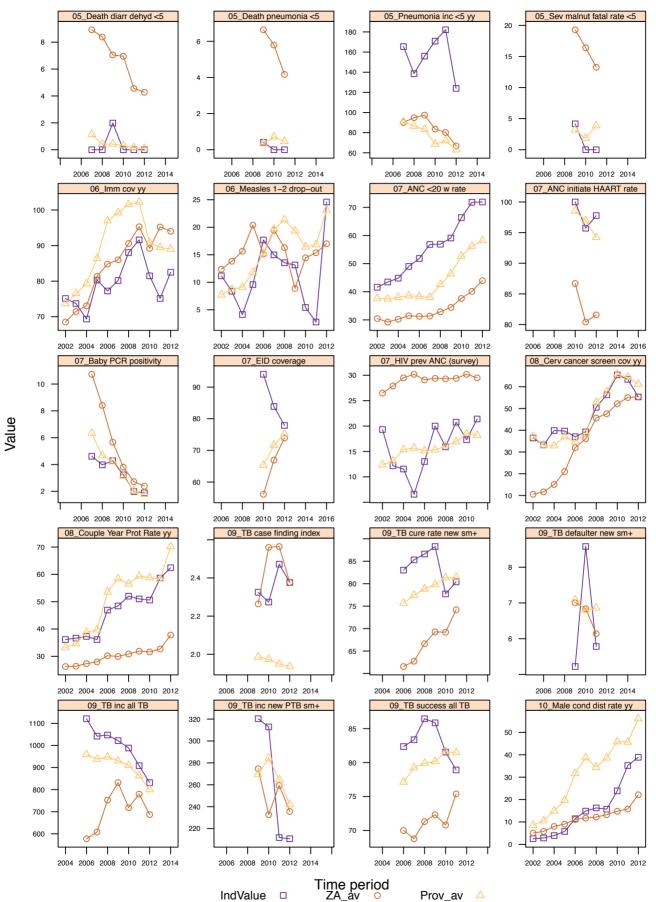
The TB incidence (all cases) was 831.5 per 100 000 people, and was above the provincial and national averages of 800.0 and 687.3 per 100 000 people respectively. The TB case finding index was 2.4%. The number of cases diagnosed with TB (new pulmonary smear-positive) increased from 539 in 2011 to 546, resulting in a TB incidence (new pulmonary smear-positive) of 210.8 per 100 000 people. However, this was below the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) increased slightly from 77.7% in 2010 to 80.4% in 2011, but was still below the provincial rate of 81.4%. The TB defaulter rate (new pulmonary smear-positive) was 5.8%, a decrease from 8.6% in 2010 and below the national rate of 6.1%. The TB treatment success rate (all TB) was 78.9% and has decreased from 86.5% in 2008.

The male condom distribution coverage was 38.9 condoms per male 15 years and older, and well above the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 4 043 at the end of 2011/12 to 4 659 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 220 to 248 in the same period.



### Annual indicators for district: Overberg: DC3

### Annual indicators for district: Overberg: DC3



408

# **Eden District Municipality**

## Naomi Massyn

The Eden District in the Western Cape Province has an estimated medical aid scheme coverage of 17.2%, the second lowest coverage in the province. The district is also one of the 11 National Health Insurance (NHI) pilot districts.

The proportion of district health services expenditure on district management remained stable over the past two years at 5.3%. The proportion of total district expenditure on primary health care (PHC) was 56%, slightly higher than the 54.9% of 2011/12. At 38.7%, the percentage expenditure on district hospital services was the lowest since 2004. This was, however, in line with the national average of 37.5% and the provincial average of 37.6%.

The PHC supervisor visit rate (fixed clinic/CHC/CDC) was 100%.

The inpatient bed utilisation rate increased from 79.9% in 2011/12 to 82.6%, well above the national rate of 67.3%. The average length of stay remained stable at 3.1 days. The expenditure per patient day equivalent was R1 389. This was much lower than the provincial (R1 647) and national (R1 823) averages. The ratio of ambulatory to inpatient days was 1.1 and on par with the provincial ratio of 1.0, but slightly lower than the national ratio of 1.3. No data are available for the OPD new client not referred rate in the Western Cape districts.

The delivery by Caesarean section rate was 20.5% and on par with the national rate of 20.8%. The delivery in facility under 18 years rate was 8.2% and slightly above the national rate of 7.7%. The DHIS facility maternal mortality ratio was 11.9 per 100 000 live births, a decrease from 60.4 per 100 000 live births in 2011/12, and more than tenfold lower than the national MMR of 132.9 per 100 000 live births. The stillbirth in facility rate decreased from 21.5 per 1 000 births in 2011/12 to 19.5 per 1 000 births. The inpatient early neonatal death rate increased from 7.0 per 1 000 live births to 8.1 in the same period.

The antenatal 1st visit before 20 weeks rate increased annually from 66.9% in 2010/11 to 73.6% in 2012/13, and was the highest in the country. The 2011 National Antenatal Sero-prevalence Survey shows an HIV prevalence among antenatal clients of 16.1% in 2011. The antenatal client initiated on ART rate decreased slightly from 89.7% in 2011/12 to 86.3%, but was still above the national rate of 81.6%. The district had the third highest rate for this indicator among the NHI districts.

Data from the National Health Laboratory Services (NHLS) showed that the estimated early infant HIV diagnosis coverage decreased from 71.5% in 2011/12 to 64.8% in 2012/13, but the proportion of PCR tests HIV positive for infants under two months of age (NHLS data) remained stable at 1.8%. The early infant HIV diagnosis coverage was well below the national coverage of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) remained stable at 1.8% the early infant HIV diagnosis coverage was well below the national coverage of 73.9%. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was the second lowest among the NHI districts. The DHIS data showed that the infant 1st PCR test positive around 6 weeks rate was 1.8%, an increase from 1.3% in 2011/12.

The immunisation coverage under 1 year was 84.5%, well below the provincial (89.0%) and national (94%) coverage. At 17.8%, the measles 1st to 2nd dose drop-out rate was lower than the provincial rate of 23.1%, but just above the national rate of 17.0%.

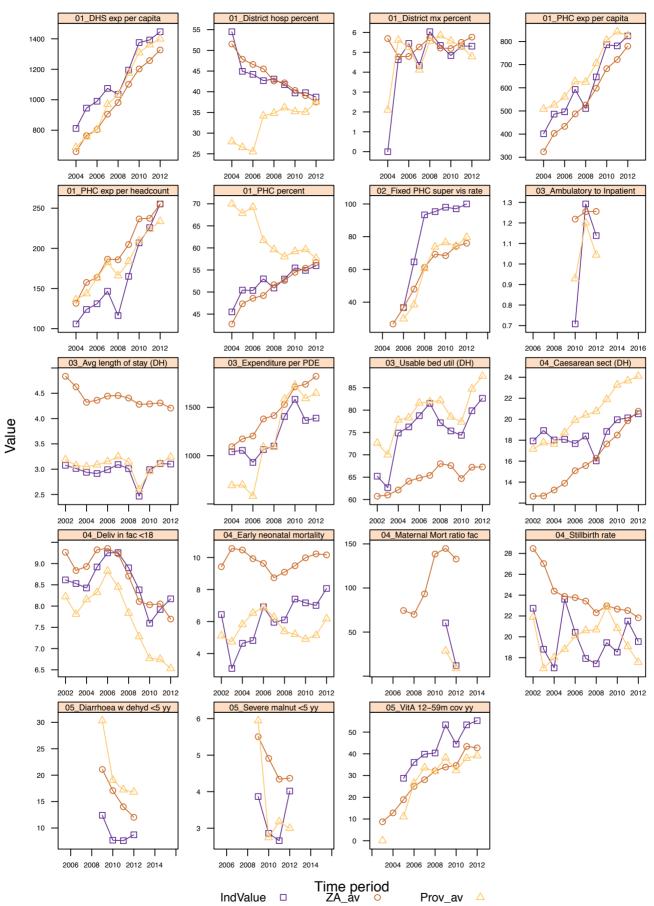
The child under 5 years diarrhoea with dehydration incidence was 8.7 per 1 000 children, the lowest in the province and well below the national incidence of 12.0 per 1 000 children. There were no fatalities in children under 5 years for diarrhoea. Eden District was one of three districts in the country with zero values. The child under 5 years pneumonia incidence dropped from 24.6 per 1 000 children in 2011/12 to 23.0, which was the lowest in the province and second lowest in the country as well as among the NHI districts. At 4.0 per 1 000 children, the child under 5 years severe acute malnutrition incidence was the highest in the province and increased from 2.7 per 1 000 children in 2011/12. No data are available in the Western Cape for child under 5 years severe acute malnutrition or pneumonia case fatality rates in 2012/13. The vitamin A coverage in children aged 12 to 59 months was 55.2%, the fourth highest in the country and the best performer in the NHI districts.

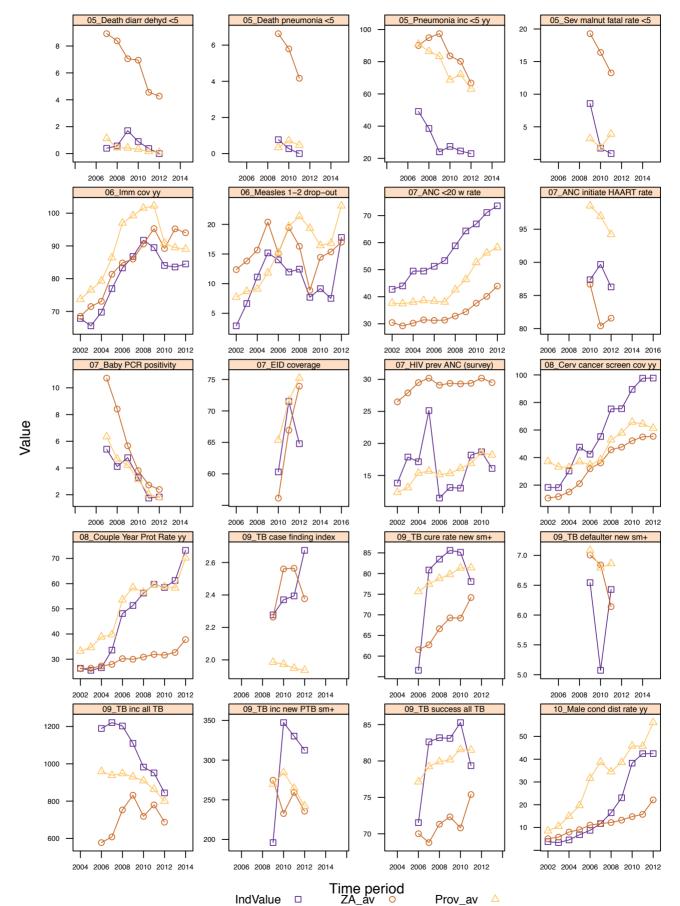
Reproductive health indicators have improved strongly over the past 10 years. At 97.7%, the cervical cancer screening coverage was the second highest in the country and among the NHI districts. The couple year protection rate of 73.2% was the highest in the country.

The TB incidence (all cases) was 844.2 per 100 000 people. This was above the provincial and national averages of 800.0 and 687.3 per 100 000 people respectively. TB incidence (new pulmonary smear-positive) was 312.5 per 100 000 people and well above the national incidence of 235.7, and the TB case finding index was 2.7%, above the national average of 2.4%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 1 846 in 2011 to 1 775. The TB (new pulmonary smear-positive) cure rate decreased from 85.1%% in 2010 to 78.1% in 2011, and was below the provincial rate of 81.4%. The TB (new pulmonary smear-positive) defaulter rate was 6.4%, lower than the provincial rate of 6.9% but the third highest among the NHI districts. The TB treatment success rate (all TB) was 79.4%.

The male condom distribution coverage remained stable at 42.5 condoms per male 15 years and older and well above the national average of 22.1 condoms. The total number of adults remaining on ART at the end of the month increased from 6 598 at the end of March 2012 to 9 705 exactly a year later. The number of children under 15 years who remained on ART at the end of the month increased from 538 at the end of March 2012 to 617 at the end of March 2013.

### Annual indicators for district: Eden: DC4





### Annual indicators for district: Eden: DC4

# **Central Karoo District Municipality**

# Naomi Massyn

The Central Karoo District in the Western Cape Province has an estimated medical scheme coverage of 12.7%, the lowest coverage in the province. It is also the district with the smallest population in the country, although it is large in area, and so has a very low average population density of about two people per square kilometre.

The proportion of district health services expenditure on district management decreased from 5.6% in 2011/12 to 4.9% in 2012/13. The reason for this might be that the District Manager of the Eden District also oversees the Central Karoo District and as such, many administrative functions reside at the Eden District office. The proportion of total district expenditure on primary health care (PHC) remained stable and was 48.7%. The percentage expenditure on district hospital services was 46.4%. This was, however, above the national average of 37.5% and the provincial average of 37.6%.

At 78.7%, the PHC supervisor visit rate (fixed clinic/CHC/CDC) was the lowest for the rural districts in the province and below the provincial average of 79.6%.

The inpatient bed utilisation rate increased from 64.3% in 2011/12 to 73.6%, and was well above the national rate of 67.3% but the lowest rate in the province. The average length of stay remained stable at 3.2 days. The expenditure per patient day equivalent was R1 463 and was much lower than the provincial (R1 647) and national (R1 823) averages. The ratio of ambulatory to inpatient days was 1.2. This indicates that the number of patients seen at the emergency/OPD units was higher than the number of patients admitted as inpatients. No data are available for the OPD new client not referred rate in the Western Cape.

The delivery by Caesarean section rate was 20.1% and has remained stable over the past five years, between 20.0% and 20.6%. The delivery in facility under 18 years rate was 9.0% and slightly above the national rate of 7.7%. The facility maternal mortality ratio was 0.0 per 100 000 live births. This might be due to no maternal deaths having occurred, or that the district did not submit data for this indicator. The stillbirth in facility rate increased from 16.3 per 1 000 births in 2011/12 to 33.5 per 1 000 births and was the highest in the province. This was also well above the national rate of 21.8%. The inpatient early neonatal death rate increased from 11.1 per 1 000 live births to 13.1 in the same period. Mortality rates tend to fluctuate widely in this district due to small numbers, making trends difficult to discern.

The antenatal 1st visit before 20 weeks rate increased annually from 57.7% in 2010/11 to 66.8% in 2012/13. The 2011 National Antenatal Sero-prevalence Survey shows an increase in the HIV prevalence among antenatal clients tested from 8.5% in 2010 to 11.3% in 2011. The antenatal client initiated on ART rate has been 100% for the past three years and was the best in the country in 2012/13.

Data from the National Health Laboratory Services (NHLS) showed that the early infant HIV diagnosis coverage was 250.8%. A value of more than 100% might be due to poor data quality or because babies born in another district are tested in the Central Karoo District.<sup>a</sup> The infant 1st PCR test positive around 6 weeks rate (DHIS data) was 0%, a decrease from 8.1% in 2011/12. Central Karoo District was the only district nationally with a zero rate. The proportion of PCR tests HIV positive for infants under two months of age (NHLS data) was the lowest in the country at 0.3%.

The immunisation coverage under 1 year was 71.5%, well below the provincial (89.0%) and national (94%) values and the lowest since 2009/10. At 15.0%, the measles 1st to 2nd dose drop-out rate was the lowest in the province and below the national rate of 17.0%.

The child under 5 years diarrhoea with dehydration incidence decreased from 29.0 episodes per 1 000 children in 2011/12 to 12.7 in 2012/13. The child under 5 years diarrhoea case fatality rate was 0%, representing one of three districts in the country with zero values. The child under 5 years pneumonia incidence increased from 26.9 cases per 1 000 children to 39.9. This was, however, well below the provincial (63.0) and national (66.8) incidences. At 3.7 cases per 1 000 children, the child under 5 years severe acute malnutrition incidence was the second highest in the province and had increased from 2.0 cases per 1 000 children in 2011/12. No data are available in Western Cape districts for the child under 5 years pneumonia or severe acute malnutrition case fatality rates in 2012/13. The vitamin A coverage in children aged 12 to 59 months was 46.9%.

The cervical cancer screening coverage was 78.5% and well above the national coverage of 55.4%. The couple year protection rate of 55.1% was also well above the national rate of 37.8%.

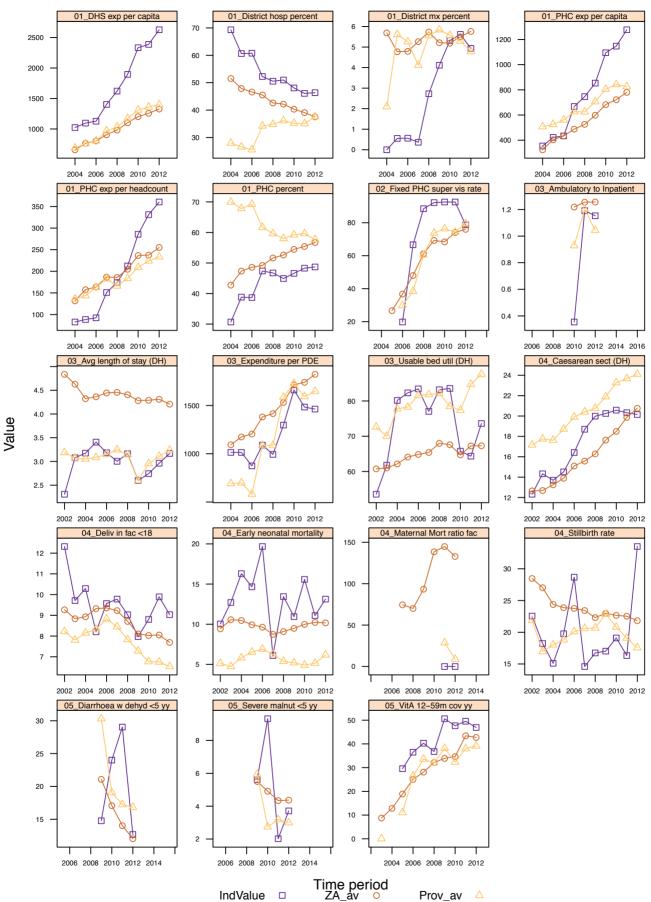
The TB incidence (all cases) was 859.4 per 100 000 people. This was above the provincial and national averages of 800.0 and 687.3 per 100 000 people respectively. The TB case finding index was 2.3%. The number of cases diagnosed with TB (new pulmonary smear-positive) decreased from 250 in 2011 to 242, resulting in a TB incidence (new pulmonary smear-positive) of 364.9 per 100 000 people, but was well above the national incidence of 235.7. The TB cure rate (new pulmonary smear-positive) increased slightly from 70.2% in 2010 to 73.1% in 2011, but was still below the provincial rate of 81.4%. The

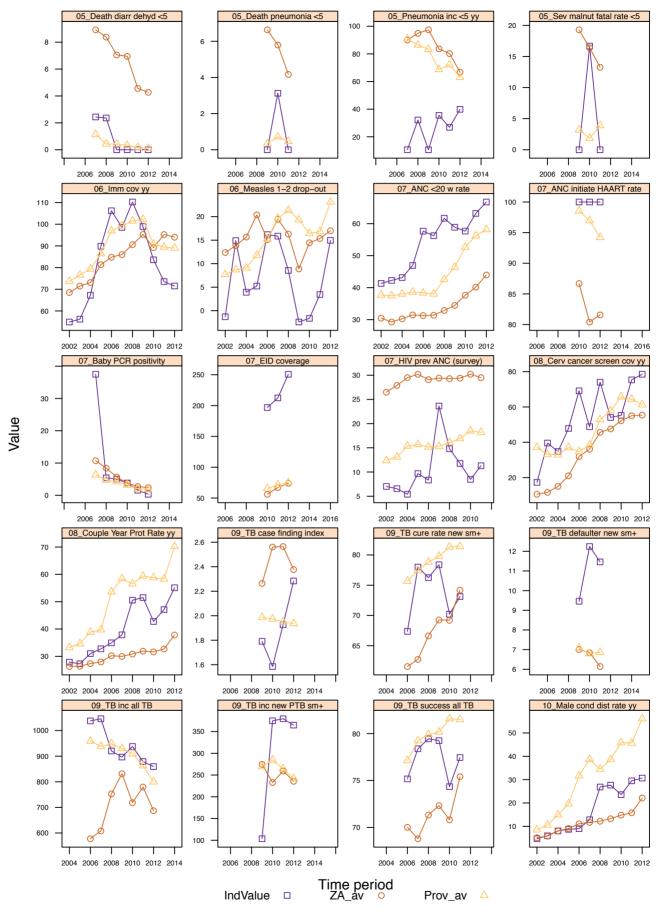
a The denominator for this indicator is based on antenatal HIV prevalence x the number of live birth registrations with Stats SA, and in a rural district with relatively few delivery services, it is quite likely that births take place out of the district.

TB defaulter rate (new pulmonary smear-positive) was 11.5%, a slight decrease from 12.2% in 2010, but this was the highest rate in the province and well above the national rate of 6.1%. The TB treatment success rate (all TB) was 77.5%.

The male condom distribution coverage remained stable at 30.7 condoms per male 15 years and older, and well above the national average of 22.1 condoms. The total number of adults remaining on ART at end of the month increased from 648 at the end of 2011/12 to 827 by the end of 2012/13. The total number of children under 15 years remaining on ART at end of the month also increased from 67 to 83 in the same period.

### Annual indicators for district: Central Karoo: DC5





### Annual indicators for district: Central Karoo: DC5

# **Definitions and sources**

- Group	Indicator	Description	Numerator	Denominator	Source
Deprivation	Deprivation Index	The deprivation index is a composite index of deprivation based on Stats SA's Census, Community Survey and General Household Survey data, calculated at the district level.			Health Economics Unit, UCT – based on data from Stats SA Census 2001, GHS and Community Survey.
Socio-demographic	Medical scheme coverage (average)	Percentage of population who have medical scheme insurance			Modelled from Stats SA GHS
∋onsni∃ ≖ ≜ ⇔	Provincial and Local Government expenditure on District Health Services per capita (uninsured)	Total amount spent on Primary Health Care (PHC) (district health services) per person without medical scheme coverage	Provincial expenditure on District Health Services ((excluding 2.8 Coroner)) plus net local government expenditure on PHC	Uninsured population (total population less medical scheme coverage x population)	Calculated from BAS, NW financial data, Treasury data on LG expenditure, DHIS population and Stats SA GHS medical scheme coverage
	Provincial PHC expenditure per capita (uninsured)	Total amount spent on non-hospital PHC health services per person without medical scheme coverage.	Provincial expenditure on the following sub-programmes of DHS (district management, clinics, CHCs, community based services and other community services) plus net local government expenditure on PHC	Uninsured population (total population less medical scheme coverage x population)	Calculated from BAS, NW financial data, Treasury data on LG expenditure, DHIS population and Stats SA GHS medical scheme coverage
	Provincial expenditure per PHC headcount	Total amount spent on non-hospital PHC health services per headcount.	Provincial expenditure on PR2.2-2.7 of DHS + net LG expenditure	Total PHC headcount	BAS, DHIS PHC headcount
, _	Percentage of district health services expenditure on district management	Percentage of total provincial district health services expenditure on district management.	Provincial expenditure on district management	Total provincial expenditure on District Health Services	BAS
, _	Percentage of district health services expenditure on district hospitals	Percentage of total provincial district health services expenditure on district hospitals.	Provincial expenditure on district hospitals	Total provincial expenditure on District Health Services	BAS
	Percentage of district health services expenditure on PHC	Total amount spent on non-hospital PHC health services.	Provincial expenditure on PHC (PR2.2-2.7)	Total provincial expenditure on District Health Services	BAS

Indicator PHC supervisor visit rate (fixed clinic/CHC/CDC)		Description Proportion fixed clinics, CHCs and CDCs visited by a dedicated supervisor according to the PHC Supervision Manual.	Numerator PHC supervisor visit (fixed clinic/ CHC/CDC)	Denominator Fixed clinics plus fixed CHCs/CDCs	Source DHIS NDoH5
Inpatient bed utilisation rate The number of patient days during the reporting expressed as a percentage of the sum of the dai of useable beds. (Comment: The calculation her	The number of patient day expressed as a percentag of useable beds. (Commer	The number of patient days during the reporting period, expressed as a percentage of the sum of the daily number of useable beds. (Comment: The calculation here is an	Total patient days - (Inpatient days + 1/2 Day patients) x 100	Total usable bed days (Inpatient beds - total) X 30.42	DHIS NDoH5 (data for district hospitals only)
t	approximation – it assumes bed for half a day, (2) there The average number of pati patient spends in hospital b Average cost per patient pe	approximation – it assumes (1) a day patient occupies a bed for half a day, (2) there are always 30 days in a month. The average number of patient days that an admitted patient spends in hospital before separation Average cost per patient per day seen in a hospital	Inpatient days + 1/2 day patients Total expenditure on health per	Separations - Discharges + Deaths + Transfers out + Day patients Patient day equivalent - Total	DHIS NDoH5 (data for district hospitals only) BAS, NW financial data, DHIS (PDE)
ate	(expressed as Rand per patie Proportion of new OPD clients	nt day equivalent) s without a referral letter	hospital OPD headcount not referred new	OPD new clients - total	(data for district hospitals only) DHIS NDOH5 (data for district hospitals only)
	The ratio of ambulatory patient	s to inpatients	OPD total headcount	Inpatient days + 1/2 day patients	DHIS NDoH5 (data for district hospitals only)
Delivery in facility under 18 years Deliveries to women under the age of 18 years rate proportion of total deliveries in health facilities	Deliveries to women under the a proportion of total deliveries in h	age of 18 years as nealth facilities	Delivery in facility to woman under 18 years	Delivery in facility total	DHIS NDoH5
Delivery by Caesarean section delivery by Caesarean section as proportion of deliveries in health facilities	Delivery by Caesarean section a deliveries in health facilities	as proportion of total	Delivery by Caesarean section	Delivery in facility total	DHIS NDoH5 (data for district hospitals only)
Stillbirth rate in facility The number of stillbirths, per 1 000 total births	The number of stillbirths, per 1 (	000 total births	The number of stillbirths	The total number of births	DHIS NDoH5
Inpatient early neonatal death rate Number of inpatient deaths within the first 7 day per 1 000 live births		in the first 7 days of life	Early neonatal deaths	Live births in facility	DHIS NDoH5
Maternal mortality in facility ratio Women who died in hospital as a result of childbearing, during pregnancy or within 42 days of delivery or termination of pregnancy, per 100 000 live births in facility	Women who died in hospital as during pregnancy or within 42 d termination of pregnancy, per 10	a result of childbearing, ays of delivery or 0 000 live births in facility	Maternal deaths in facility	Live births in facility	DHIS NDoH5

Group	Indicator	Description	Numerator	Denominator	Source
тотма	Antenatal visits before 20 weeks rate	Women who have a booking visit (first visit) before they are 20 weeks into their pregnancy as proportion of all antenatal 1st visits	Antenatal 1st visits before 20 weeks	Antenatal 1st visits	DHIS NDoH5
	HIV prevalence among antenatal clients tested (survey)	The proportion of antenatal clients surveyed who test positive for HIV			Antenatal Survey
	Antenatal client initiated on ART rate	Antenatal clients on ART as a proportion of the total number of antenatal clients who are HIV positive and not previously on ART	Antenatal clients initiated on ART	Antenatal clients eligible for ART	DHIS NDoH5
	Early infant diagnosis coverage	The proportion of infants born to HIV-positive mothers who receive a PCR test before 2 months of age	Number of PCR tests done in infants under 2 months	Estimated number of infants born to HIV-positive women	NHLS, Antenatal Survey, Stats SA live births
	Proportion of PCR tests HIV- positive under 2 months of age	The proportion of PCR tests that are positive for HIV (in infants under 2 months)	PCR tests positive for infants under 2 months	Number of PCR tests done in infants under 2 months	NHLS
	Infant 1st PCR test positive around 6 weeks rate	Infants tested PCR positive for the first time around 6 weeks after birth as proportion of infants PCR tested around 6 weeks	Infant 1st PCR test positive around 6 weeks	Infant 1st PCR test around 6 weeks	DHIS NDoH5
noitesinum	Immunisation coverage under 1 year	The percentage of all children in the target area under one year who complete their primary course of immunisation. A Primary Course includes BCG, OPV 1,2 & 3, DTP-Hib 1,2 & 3, HepB 1,2 & 3, and 1st measles (usually at 9 months).	Children fully immunised under 1 year	Target population under 1 year	DHIS NDoH5
ml	Immunisation coverage under 1 year – adjusted	The percentage of all children in the target area under one year who complete their primary course of immunisation. A Primary Course includes BCG, OPV 1,2 & 3, DTP-Hib 1,2 & 3, HepB 1,2 & 3, and 1st measles (usually at 9 months).	Children fully immunised under 1 year	Target population under 1 year (Census 2011)	DHIS NDoH5, Stats SA Census 2011
	Measles 1st to 2nd drop-out rate	The percentage of children who dropped out between the first and the second dose of the measles vaccine	Measles 1st dose under 1 year - Measles 2nd dose	Measles 1st dose under 1 year	DHIS NDoH5

Group	Indicator	Description	Numerator	Denominator	Source
dtlsəH bi	Vitamin A coverage 12 to 59 months	Proportion of children 12-59 months who received vitamin A 200 000 units, preferably every six months. The denominator is therefore the target population 1-4 years multiplied by 2	Vitamin A dose to children 12-59 months children	Population 12-59 months multiplied by 2	DHIS NDoH5
IND CPI	Child under 5 years diarrhoea with dehydration incidence	Children under 5 years newly diagnosed with diarrhoea with dehydration per 1 000 children under 5 years in the population	Child under 5 years diarrhoea with dehydration new	Population under 5 years	DHIS NDoH5
	Child under 5 years pneumonia incidence	Children under 5 years newly diagnosed with pneumonia per 1 000 children under 5 years in the population	Child under 5 years with pneumonia new	Population under 5 years	DHIS NDoH5
	Child under 5 years severe acute malnutrition incidence	Children under 5 years newly diagnosed with severe acute malnutrition per 1 000 children under 5 years in the population	Child under 5 years with severe acute malnutrition new	Population under 5 years	DHIS NDoH5
	Child under 5 years diarrhoea case fatality rate	Proportion of children under 5 years admitted with diarrhoea who died	Child under 5 years with diarrhoea death	Child under 5 years with diarrhoea admitted	DHIS NDoH5
	Child under 5 years pneumonia case fatality rate	Proportion of children under 5 years admitted with pneumonia who died	Child under 5 years pneumonia death	Child under 5 years pneumonia admitted	DHIS NDoH5
	Child under 5 years severe acute malnutrition case fatality rate	Proportion of children under 5 years admitted with severe acute malnutrition who died	Child under 5 years severe acute malnutrition death	Child under 5 years severe acute malnutrition admitted	DHIS NDoH5
productive Health	Couple year protection rate	Women protected against pregnancy by using modern contraceptive methods, including sterilisations, as proportion of female population 15-44 years. Contraceptive years are the total of (Oral pill cycles / 13) + (Medroxyprogesterone injection / 4) + (Norethisterone enanthate injection / 6) + (IUCD x 4) +)Male condoms distributed / 200) + (Male sterilisation x 20) + (Female sterilisation x 10)	Contraceptive years dispensed (including sterilisations)	Female target population 15-44 years	DHIS NDoH5
эЯ	Cervical cancer screening coverage	Cervical smears in women 30 years and older as a proportion of 10% of the female population 30 years and older	Cervical cancer screening in women 30 years and older	10 percent of female target population 30 years and older	DHIS NDoH5

Numerator         Denominator         Source	B smear- Number of TB cases recorded in - NDoH TB Directorate ETR.Net	TB suspect 5 years and older sputum PHC headcount 5 years and older DHIS NDoH5 vas sent sent	in the Number of diagnosed TB patients (all Total population TB) starting treatment in the period	tive) per Number of diagnosed TB patients Total population NDoH TB Directorate (new pulmonary sm+) starting treatment in the period	s those TB client cured OR completed TB (new pulmonary) client initiated NDoH TB Directorate treatment on treatment	ts who The number of initially smear-positive Total number of new PTB smear- d (which PTB patients who converted to negative cases started on treatment negative smears at two or three during the specified time.	ts who The number of initially smear- positive PTB patients who default on treatment treatment during the specified time.	a the Male condoms distributed Male population 15 years and older DHIS NDoH5 s or other	Adults remaining on ART - total - DHIS NDoH5	Children remaining on ART - total - DHIS NDoH5
Description	Number of TB cases reported (new pulmonary TB sn positive) in ETR.Net	Proportion of clients 5 years and older, who were identified as TB suspects and for whom sputum was sent to the laboratory	TB cases diagnosed (all TB) per 100 000 people in the catchment population	New TB cases diagnosed (pulmonary smear-positive) per 100 000 people in the catchment population	Proportion TB clients (ALL types of TB) cured plus those who completed treatment	The proportion of new smear-positive PTB patients who completed treatment and were proven to be cured (which means that they had two negative smears on separate occasions at least 30 days apart)	The proportion of new smear-positive PTB patients who default on treatment	Number of male condoms distributed to clients via the facility or via factories, offices, restaurants, NGOs or other outlets – per male 15 years and older	Adults remaining on ART total	Children remaining on ART total
Group Group	<ul> <li>TB case finding (new pulmonary TB smear-positive)</li> </ul>	TB case finding index	Incidence (diagnosed cases) of TB - all types	Incidence (diagnosed cases) of TB - new PTB smear-positive	TB successful treatment rate (all TB)	TB cure rate (new pulmonary smear positive)	TB defaulter rate (new pulmonary smear positive)	Male condom distribution rate	HIX Adult remaining on ART at end of the month – total	Children under 15 years remaining on ART at end of the month – total



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