

Appendix I

Definitions and sources

Indicator Group	Indicator	Description	Numerator	Denominator	Source
Deprivation	Deprivation Index	The deprivation index is a composite index of deprivation based on StatsSA's Census, Community Survey and General Household Survey data, calculated at the district level.			Health Economics Unit, UCT – based on data from StatsSA Census 2001, GHS and Community Survey.
Insurance	Medical scheme coverage (ave)	Percentage of population who have medical scheme insurance.			Modelled from StatsSA GHS
Finance	Total PHC expenditure per capita (uninsured person)	Total amount spent on PHC (district health services) per person without medical aid coverage.	Provincial expenditure on District Health Services (all sub-programmes) plus nett local government expenditure on PHC	Uninsured population (total population less medical aid coverage x population)	Calculated from BAS, NW financial data, Treasury data on LG exp, DHIS population and StatsSA GHS medical aid coverage
	PHC expenditure per capita (uninsured person)	Total amount spent on non-hospital PHC health services per person without medical aid coverage.	Provincial expenditure on the following sub-programmes of DHS (district management, clinics, CHCs, community based services and other community services) plus nett local government expenditure on PHC	Uninsured population (total population less medical aid coverage x population)	Calculated from BAS, NW financial data, Treasury data on LG exp, DHIS population and StatsSA GHS medical aid coverage
	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
	Proportion of District Health Expenditure on District Management	Percentage of total district health services spent on district management.	Provincial expenditure on District Management	Total provincial expenditure on District Health Services	BAS
	Proportion of District Health Expenditure on District Hospitals	Percentage of total district health services spent on district hospitals.	Provincial expenditure on District Hospitals	Total provincial expenditure on District Health Services	BAS
	Proportion of District Health Services Expenditure spent on PHC	Total amount spent on non-hospital PHC health services per primary health care visit.	Provincial expenditure on the following sub-programmes of DHS (district management, clinics, CHCs, community based services and other community services) plus nett local government expenditure on PHC	Total PHC headcount	Calculated from BAS, Treasury data on LG exp, DHIS PHC headcount

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Management	Utilisation rate – PHC	The rate at which PHC services are utilised by the catchment population, represented as the average number of visits per person per year in the catchment population. The denominator is usually Census-derived population estimates.	PHC total headcount	Total population	DHIS NDoH5
	Utilisation rate under 5 years – PHC	The rate at which PHC services are utilised by the under-5 catchment population, represented as the average number of visits per child per year in the catchment population. The denominator is usually Census-derived population estimates.	PHC headcount under 5 years	Target population under 5 years	DHIS NDoH5
Hospital services	Fixed PHC facilities with a monthly supervisory visits rate	Proportion of fixed PHC facilities visited by a dedicated clinic supervisor, who performs a visit according to the clinic supervision manual.	Number of fixed PHC facilities visited at least once	Number of fixed PHC facilities	DHIS NDoH5
	BUR: Usable bed utilisation rate (district hospitals)	The number of patient days during the reporting period, expressed as a percentage of the sum of the daily number of usable beds. (Comment: The calculation here is an approximation - it assumes (1) a day patient occupies a bed for half a day, (2) there are always 30 days in a month.	Total patient days - (Inpatient days + 1/2 Day patients) x 100	Total usable bed days	DHIS NDoH5 (data for District Hospitals only)
	ALOS: Average length of stay (district hospitals)	The average number of patient days that an admitted patient spends in hospital before separation	Inpatient days + 1/2 Day patients	Separations - Discharges + Deaths + Transfers out + Day patients	DHIS NDoH5 (data for District Hospitals only)
Chronic	Usable beds per 1 000 uninsured population	The usable beds in a particular district for every 1 000 uninsured population	Usable beds (district hospital)	Uninsured population	DHIS NDoH5 (data for District Hospitals only)
	Expenditure per Patient Day Equivalent (district hospitals)	Average cost per patient per day seen in a hospital (expressed as Rands per patient day equivalent)	Total expenditure on health per hospital	Patient day equivalent - Total	BAS, NW financial data, DHIS (PDE)
	Hypertension detection rate	Newly diagnosed hypertension patients put on treatment as proportion of PHC headcount 5 years and older	Hypertension cases put on treatment - new	PHC headcount 5 years and older	DHIS NDoH5 (data for PHC facilities only)
HIV	Mental health case load	The number of mental health visits as a percentage of PHC total headcount.	Mental health visits under 18 years and older	Total PHC headcount	DHIS NDoH5 (data for PHC facilities only)
	HIV testing rate (excluding antenatal)	The proportion of non-antenatal clients who were counselled and received an HIV test.	HIV client tested (excluding antenatal)	HIV pre-test counselled (excluding antenatal)	DHIS NDoH5
	Antenatal client HIV 1st test positive rate	Antenatal clients tested HIV positive as the proportion of antenatal clients HIV tested for the first time during current pregnancy.	Antenatal client HIV 1st test positive	Antenatal client HIV 1st test	DHIS NDoH5

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	Antenatal client HIV 1st test rate	Antenatal clients HIV tested for the first time during current pregnancy as the proportion of antenatal clients eligible for first HIV tests.	Antenatal client HIV 1st test	Antenatal client eligible for HIV 1st test (calculated)	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 HAART rate	HIV positive antenatal clients initiated on HAART as the proportion of HIV positive antenatal clients with CD4 counts under the specified threshold and/or WHO staging of 4	Antenatal client initiated on HAART	Antenatal client eligible for HAART	DHIS NDoH5
	Baby initiated on HAART under 18 months rate	HIV positive babies that was initiated on HAART as The proportion of all HIV positive babies	Baby initiated on HAART under 18 months	Baby eligible for HAART	DHIS NDoH5
	Early infant diagnosis coverage	The proportion of estimated 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, DHIS
	Baby PCR test around 6 weeks uptake rate	Babies PCR tested 6 weeks after birth as the proportion of live births to HIV positive women.	Baby PCR test around 6 weeks	Live birth to HIV positive woman	DHIS NDoH5
	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
	Baby tested PCR positive six weeks after birth as a proportion of babies tested at six weeks	Babies tested PCR positive 6 weeks after birth as the proportion of babies PCR tested at 6 weeks.	Baby PCR test positive at 6 weeks	Baby PCR test around 6 weeks	DHIS NDoH5
Immunisation	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
	Measles 1st dose coverage	The percentage of children who received their 1st measles dose (normally at 9 months) - annualised.	Measles 1st dose under 1 year	Target population under 1 year	DHIS NDoH5
	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
	RV 1st dose coverage	The proportion of children who received their 1st rotavirus dose - annualised.	RV 1st doses to children under 1 year	Target population under 1 year	DHIS NDoH5
	Pneumococcal vaccine 3rd dose	The proportion of children who received their third PCV doses normally at 9 months) - annualised	PCV 3rd doses to children under 1 year	Target population under 1 year	DHIS NDoH5
Maternal Health	Facility maternal mortality rate	Number of women who died as a result of childbearing, during pregnancy or within 42 days of delivery or termination of pregnancy, per 100,000 live births	Maternal deaths in facility	Live births in facility	DHIS NDoH5
	Proportion of deliveries in facility to women under 18 years	The proportion of pregnant women below the age of 18 years at delivery	Delivery in facility under 18 years	Delivery in facility	DHIS NDoH5
	Caesarean section rate (district hospitals)	The number of caesarean section deliveries, expressed as a percentage of all deliveries	Caesarean section deliveries	All deliveries in this facility	DHIS NDoH5 (data for District Hospitals only)

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Reproductive Health	Male condom distribution rate	The number of male condoms distributed – to patients at the facility or through other channels – per male 15 years and older. USE: To assess distribution of male condoms in the country.	Male condoms distributed	Male target population 15 years and older	DHIS NDoH5
	Couple year protection rate	The rate at which couples (specifically women) are protected against pregnancy using modern contraceptive methods INCLUDING sterilisations	Contraceptive years dispensed (including sterilisations)	Female target population 15-44 years	DHIS NDoH5
	Cervical cancer screening coverage	Women 30 years and older with a cervical (pap) smear done for screening purposes according to the national policy of screening all women in this age category every 10 years, as the proportion of all women 30 years and older in the target population	Cervical smear in woman 30 years and older	10 percent of female target population 30 years and older	DHIS NDoH5
	Antenatal visits before 20 weeks rate	The proportion of women who have a booking visits first visit) before they are 20 weeks (about half way) into their pregnancy	Antenatal 1st visits before 20 weeks	Antenatal 1st visits	DHIS NDoH5
	Vitamin A coverage 12 to 59 months	Proportion of children 12-59 months receiving vitamin A 200,000 units twice a year. The denominator is therefore the target population 1-4 years multiplied by 2	Vitamin A supplement to 12-59 months children	Target population 12-59 months multiplied by 2	DHIS NDoH5
Child Health	Diarrhoea incidence under 5 years	The number of children with diarrhoea per 1 000 children in the catchment population.	Diarrhoea cases under 5 years – new	Population under 5 years	DHIS NDoH5
	Stillbirth rate	The number of stillbirths, per 1000 total births	The number of stillbirths	The total number of births	DHIS NDoH5
	Early neonatal death rate	Number of inpatient deaths within the first 7 days of life per 1 000 live births	Early neonatal deaths	Live births in facility	DHIS NDoH5
	Facility under-1 mortality rate	The proportion of inpatients under 1 year that died during their stay in the facility	Inpatients death under 1 year	Inpatients separations under 1 year	DHIS NDoH5
	Facility under-5 mortality rate	The proportion of inpatients under 5 year that died during their stay in the facility	Inpatients death under 5 year	Inpatients separations under 5 year	DHIS NDoH5
Maternal Health	Delivery rate in facility under 18 years	The proportion of pregnant women under 18 years at delivery.	Delivery in facility under 18 years	Deliveries in facility	DHIS NDoH5
	Delivery rate in facility	The percentage of deliveries taking place in health facilities under supervision of trained personnel. The number of children under one year, factorised by 1.07 due to infant mortality, is used as an estimated proxy denominator for expected deliveries per month.	Deliveries in facility	All expected deliveries in target population	DHIS NDoH5

TB Group	Indicator	Description	Numerator	Denominator	Source
Burden of Disease	Number of TB cases per district – new smear positive	Number of TB cases per district – new smear positive	Number of TB cases per district – new smear positive	-	NDoH TB Directorate
	TB two months smear conversion rate (new Sm+)	The smear conversion rate (SCR) is the percentage of new smear positive TB cases that are smear negative after two months of anti-TB treatment and are therefore no longer infectious.	Number of new PTB cases who were +ve before starting treatment but show a -ve smear after 2 months treatment	Total number of new smear positive cases registered during the specified time.	NDoH TB Directorate
	New smear positive TB cure rate	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 number of initially smear positive patients who converted to negative smears at two or three months after starting treatment	Total number of new PTB smear positive cases started on treatment during the specified time.	NDoH TB Directorate
	New smear positive TB defaulter rate	The proportion of new smear positive PTB patients who default on treatment.	The number of initially smear positive patients who default on treatment	Total number of new PTB smear positive cases started on treatment during the specified time.	NDoH TB Directorate
	Percentage of deaths due to communicable diseases, maternal, perinatal or nutritional conditions	The proportion of deaths due to communicable diseases / maternal conditions	Number of deaths due to communicable diseases / maternal conditions	Total number of deaths	StatsSA Causes of Death
	Percentage of Years of Life Lost (YLL) due to communicable, maternal, perinatal, nutrition causes	The proportion of YLLs due to communicable diseases / maternal conditions	Number of YLLs due to communicable diseases / maternal conditions	Total number of YLLs	StatsSA Causes of Death
	Percentage of deaths garbage	The proportion of deaths that are garbage codes.	Number of garbage code deaths	Total number of YLLs	StatsSA Causes of Death
	Percentage of deaths due to HIV or TB	The proportion of deaths due to HIV or TB	Number of deaths due to HIV or TB	Total number of deaths	StatsSA Causes of Death
	Percentage of Years of Life Lost (YLL) due to HIV or TB	The proportion of YLLs due to HIV or TB	Number of YLLs due to HIV or TB	Total number of YLLs	StatsSA Causes of Death
	Percentage of deaths ill-defined	The proportion of deaths that are ill-defined.	Number of ill-defined deaths	Total number of deaths	StatsSA Causes of Death
	Percentage of deaths due to injuries	The proportion of deaths due to injuries	Number of deaths due to injuries	Total number of deaths	StatsSA Causes of Death
	Percentage of Years of Life Lost (YLL) due to injuries	The proportion of YLLs due to injuries	Number of YLLs due to injuries	Total number of YLLs	StatsSA Causes of Death
	Percentage of deaths due to non-communicable diseases	The proportion of deaths due to NCDs	Number of deaths due to NCDs	Total number of deaths	StatsSA Causes of Death
	Percentage of Years of Life Lost (YLL) due to non-communicable diseases	The proportion of YLLs due to NCDs	Number of YLLs due to NCDs	Total number of YLLs	StatsSA Causes of Death



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