

Definitions and sources (abbreviations given in footnote)

Definitions and sources

Group	Indicator	Description	Numerator	Denominator	Source
Deprivation	South African Index of Multiple Deprivation Rank (1 = most deprived)	Ranking for composite index of deprivation. Indicators cover the following domains: income and material deprivation, employment deprivation, education deprivation, and living environment deprivation			Southern African Social Policy Research Institute (SASPRI), based on data from StatsSA Census 2011
	Provincial and Local Government expenditure on District Health Services per capita (uninsured)	Total amount spent on PHC (DHS) per person without medical scheme coverage	Provincial expenditure on DHS (excluding 2.8 Coroner) plus net LG 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 data and StatsSA GHS medical scheme coverage
Finance	Provincial PHC expenditure per capita (uninsured)	Total amount spent on non-hospital PHC health services per person without medical scheme coverage	Provincial expenditure on PR2.2-2.7 of DHS + net LG expenditure	Uninsured population (total population less medical scheme coverage x population)	Calculated from BAS, NW financial data, Treasury data on LG expenditure, DHIS population and StatsSA 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
Management PHC	Percentage ideal clinics	Percentage of fixed PHC facilities assessed on the ideal clinic dashboard that achieved Ideal Clinic status (silver, gold, platinum or diamond status)	Number of fixed PHC facilities achieving silver, gold, platinum or diamond status on the ideal clinic dashboard	Fixed clinics plus fixed CHCs/ CDCs	DHIS NDoH5, Ideal Clinic review tools
	Percentage of assessed PHC facilities with 90% of tracer medicines available	Percentage of PHC facilities, out of all facilities that have conducted a status determination, with 90% of the tracer medicines available	Number of fixed PHC facilities with 90% of the tracer medicines available	Number of PHC facilities that conducted a status determination	Ideal Clinic review tools
Management Inpatients	PHC utilisation rate	The rate at which PHC services are utilised by clients of all ages in the catchment population, represented as the average number of PHC visits per client per year in the target population. The denominator is usually Census-derived population	Total PHC headcount	Total population	DHIS NDoH5
	Average length of stay	Average number of patient days that an admitted patient spends in hospital before separation	Inpatient days + 1/2 day patients	Separations = Discharges (including day patients) + Deaths + Transfers out	DHIS NDoH5
	Inpatient bed utilisation rate	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 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 = (Inpatient beds - total) x 30.42	DHIS NDoH5
	Expenditure per Patient Day Equivalent	Average cost per patient per day seen in a hospital (expressed as Rand per PDE)	Total expenditure on health per hospital	PDE total	BAS, NW financial data, DHIS (PDE)
	OPD new client not referred rate (district hospitals)	Proportion of new OPD clients without a referral letter	OPD headcount not referred new	OPD new clients total	DHIS NDoH5
	Inpatient crude death rate	Proportion of admitted clients/separations who died during hospital stay	Inpatient deaths - total	Separations = Discharges (including day patients) + Deaths + Transfers out	DHIS NDoH5

Group	Indicator	Description	Numerator	Denominator	Source
Delivery	Delivery in facility under 18 years rate	Deliveries to women under the age of 18 years as proportion of total deliveries in health facilities	Delivery in facility under 18 years	Delivery in facility total	DHIS NDoH5
	Inpatient 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
	Inpatient neonatal death rate	Infants 0–28 days who died during their stay in the facility as a proportion of live births in facility	Neonatal 0–28 days death in facility	Live birth in facility	DHIS NDoH5
	Maternal mortality ratio (NCCEMD)	Women who die as a result of childbearing, during pregnancy or within 42 days of delivery or termination of pregnancy, per 100 000 live births, and where the death occurs in a health facility	Maternal deaths in facility registered with NCCEMD	Live births denominator from DHIS	NCCEMD
	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	Maternal deaths in facility	Live births in facility	DHIS NDoH5
	Mother postnatal visit within 6 days rate	Proportion of mothers who received postnatal care within 6 days after delivery as proportion of deliveries in health facilities	Mother postnatal visit within 6 days after delivery	Delivery in facility total	DHIS NDoH5
	Antenatal 1 st visits before 20 weeks rate	Women who have a booking visit (1 st visit) before they are 20 weeks into their pregnancy as proportion of all antenatal 1 st visits	Antenatal 1 st visits before 20 weeks	Antenatal 1 st visits	DHIS NDoH5
	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
	Infant PCR test positive around 10 weeks rate	Infants tested PCR positive for follow up test as a proportion of infants PCR tested around 10 weeks	Infant PCR test positive around 10 weeks	Infant PCR test around 10 weeks	DHIS NDoH5
	Immunisation coverage under 1 year	Percentage of all children in the target area under 1 year who complete their primary course of immunisation. A primary course includes BCG, OPV1, DTaP-IVP-Hib-HBV 1, 2 and 3, PCV 1, 2 and 3, RV 1 and 2 and measles 1	Children fully immunised under 1 year	Target population under 1 year	DHIS NDoH5
Immunisation	Measles 2 nd dose coverage	Proportion of children 1 year (12–23 months) who received measles 2 nd dose, normally at 18 months	Measles 2 nd dose	Population 1 year	DHIS NDoH5
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Group	Indicator	Description	Numerator	Denominator	Source
Child Health	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	Population 12–59 months multiplied by 2	DHIS NDoH5
	Infant exclusively breastfed at DTaP-IPV-Hib-HBV 3 rd dose rate	Proportion infants reported exclusively breastfed at 14 weeks DTaP-IPV-Hib-HBV 3 rd dose vaccination	Infant exclusively breastfed at DTaP-IPV-Hib-HBV 3 rd dose	DTaP-IPV-Hib-HBV 3 rd dose	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
	Inpatient death under 1 year rate	Children under 1 year who died during their stay in the facility as a proportion of inpatient separations under 1 year	Inpatient death under 1 year	Separations under 1 year = Discharges (including day patients) + Deaths + Transfers out	DHIS NDoH5
	Inpatient death under 5 years rate	Children under 5 years who died during their stay in the facility as a proportion of inpatient separations under 5 years	Inpatient death under 5 years	Separations under 5 years = Discharges (including day patients) + Deaths + Transfers out	DHIS NDoH5
	School Grade 1 screening coverage	Proportion of Grade 1 learners screened by a nurse in line with the ISHP service package	School Grade 1 learners screened	School Grade 1 learners total	DHIS NDoH5
	School Grade 8 screening coverage	Proportion of Grade 8 learners screened by a nurse in line with the ISHP service package	School Grade 8 learners screened	School Grade 8 learners total	DHIS NDoH5
	Reproductive Health	Couple year protection rate	Women protected against pregnancy by using modern contraceptive methods, including sterilisations, as proportion of female population 15–49 year. Contraceptive years are the total of (Oral pill cycles / 15) + (Medroxyprogesterone injection / 4) + (Norethisterone enanthate injection / 6) + (IUCD x 4.5) + (Sub-dermal implant x 2.5) + Male condoms distributed / 120) + (Female condoms distributed / 120) + (Male sterilisation x 10) + (Female sterilisation x 10)	Contraceptive years dispensed (including sterilisations)	Female target population 15–44 years
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% of female target population 30 years and older	DHIS NDoH5

Indicator	Description	Numerator	Denominator	Source
TB incidence (all types)	TB cases diagnosed (all TB) per 100 000 people in the catchment population	Number of diagnosed TB patients (all TB) starting treatment in the period	Total population	NDoH TB Directorate
TB successful treatment rate	Proportion TB clients (ALL types of TB) cured plus those who completed treatment	TB client cured OR completed treatment	TB client initiated on treatment	NDoH TB Directorate
TB death rate	TB clients who died during treatment as a proportion of TB clients started on treatment	Number of patients who died	All TB patients in cohort	NDoH TB Directorate
TB loss to follow-up rate	Proportion of TB patients who default on treatment	Number of TB patients who default on treatment	Total number of TB cases started on treatment during the specified time	NDoH TB Directorate
TB DR treatment success rate	Proportion TB DR clients cured plus those who completed treatment	TB DR client cured OR completed treatment	TB DR client initiated on treatment	NDoH TB Directorate
TB DR client death rate	TB DR clients who died during treatment as a proportion of TB clients started on treatment	Number of TB DR patients who died	All TB DR patients in cohort	NDoH TB Directorate
TB DR client loss to follow up rate	Proportion of TB DR patients who default on treatment	Number of TB DR patients who default on treatment	Total number of TB DR cases started on treatment during the specified time	NDoH TB Directorate
TB client initiated on treatment rate	Percentage of GeneXpert confirmed TB patients who are started on treatment	TB client (with GeneXpert results) start on TB treatment	Number of TB tests with Mycobacterium TB detected	NDoH TB Directorate, NHLS (based only on tests done using GeneXpert technology)
TB rifampicin resistance confirmed client rate	Percentage of positive TB tests that are rifampicin resistant	Number of TB tests rifampicin resistant	Number of TB tests with Mycobacterium TB detected	NHLS (based only on tests done using GeneXpert technology)
TB Rifampicin resistant clients treatment initiation rate	TB Rifampicin Resistant confirmed clients started on treatment (EDRWeb clients where GeneXpert RIFRESULT01=Resistant) as a proportion of TB Rifampicin Resistant confirmed clients (based on GeneXpert results)	TB Rifampicin Resistant confirmed clients started on treatment (EDRWeb clients where GeneXpert RIFRESULT01=Resistant) as a proportion of TB Rifampicin Resistant confirmed clients (based on GeneXpert results)	TB Rifampicin Resistant confirmed client	NHLS (based only on tests done using GeneXpert technology)
TB symptom 5 years and older screened in facility rate	Clients 5 years and older screened for TB symptoms as a proportion of PHC headcount 5 years and older	Client 5 years and older screened for TB	PHC headcount 5 years and older	DHIS NDoH5
TB/HIV co-infected client on ART rate (ETR.net)	HIV-positive TB cases on ART	HIV-positive TB cases on ART	HIV-positive TB cases	NDoH TB Directorate

Group	Indicator	Description	Numerator	Denominator	Source
HIV and AIDS	Male condom distribution coverage	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	Male condoms distributed	Male population 15 years and older	DHIS NDoH5
	Medical male circumcision rate	Number of male circumcision performed per male 10 years and older per 1 000 of target population	Medical male circumcision 10–14 years + 15 years and older	Male population 10 years and older	DHIS NDoH5
	HIV testing coverage (including ANC)	Clients HIV tested as proportion of population 15–49 years	HIV test client 15–49 years	Population 15–49 years	DHIS NDoH5
	HIV test positive client 15 years and older rate (including ANC)	Clients tested HIV positive as a proportion of clients tested for HIV	HIV test positive client 15 years and older	HIV test client 15 years and older	DHIS NDoH5
	Adult with viral load completion rate at 12 months	Proportion of adult clients still on treatment who had viral load test done at 12 months	ART adult client viral load done	ART first line regimen + ART second line regimen at intervals	DHIS NDoH5
	Child with viral load completion rate at 12 months	Proportion of children still on treatment who had viral load test done at 12 months	ART child viral load done	ART first line regimen + ART second line regimen at intervals	DHIS NDoH5
	Adult with viral load suppressed rate 12 months	Proportion of adult ART clients with viral load suppressed at 12 months	ART client viral load under 400 cps/mL at 12 months	ART viral load done (VLD) at	DHIS NDoH5
	Child with viral load suppressed rate 12 months	Proportion of children ART clients with viral load suppressed at 12 months	ART client viral load under 400 cps/mL at 12 months	ART viral load done (VLD) at	DHIS NDoH5
	Adult percentage on ART after 12 months	ART adult client on ART after 12 months	Adult client on ART after 12 month	ART adult client any regimen + Stopped after 12 months	DHIS NDoH5
	Child percentage on ART after 12 months	ART child client on ART after 12 months	Child client on ART after 12 month	ART any regimen + Stopped after 12 months	DHIS NDoH5
NCDs	Clients remaining on ART rate	Percentage of estimated people living with HIV who remain on ART	Total clients remaining on ART at end of the month	Estimated number of people living with HIV	NDoH TB Directorate
	Hypertension incidence	Newly diagnosed hypertension clients initiated on treatment per 1 000 population 40 years and older	Hypertension client treatment new	Population 40 years and older	DHIS NDoH5
Burden of Disease	Diabetes mellitus incidence	Newly diagnosed diabetes clients initiated on treatment per 1 000 population	Diabetes client treatment new	Population total	DHIS NDoH5
	Percentage of YLLs due to communicable, maternal, perinatal, nutritional causes	Percentage of YLLs due to communicable, maternal, perinatal, nutritional causes	Number of YLLs due to communicable, maternal, perinatal, nutritional causes	Total number of YLLs	StatsSA
	Percentage of deaths garbage codes	Percentage of deaths garbage codes	Number of garbage code deaths	Total number of YLLs	StatsSA
	Percentage of YLLs due to HIV and TB	Percentage of YLLs due to HIV and TB	Number of YLLs due to HIV and TB	Total number of YLLs	StatsSA
	Percentage of deaths ill-defined	Percentage of deaths ill-defined	Number of ill-defined deaths	Total number of deaths	StatsSA
	Percentage of YLLs due to injuries	Percentage of YLLs due to injuries	Number of YLLs due to injuries	Total number of YLLs	StatsSA
	Percentage of YLLs due to non-communicable diseases	Percentage of YLLs due to NCDs	Number of YLLs due to NCDs	Total number of YLLs	StatsSA
	Percentage of deaths due to communicable, maternal, perinatal or nutritional conditions	Percentage of deaths due to communicable, maternal, perinatal or nutritional conditions	Number of deaths due to Communicable diseases / Maternal conditions	Total number of deaths	StatsSA

ART = antiretroviral treatment; BAS = National Treasury Basic Accounting System;
 BCG = bacille Calmette-Guerin; BP = blood pressure; CDC = Community Day Centre;
 CHC = Community Health Centre; DHIS = District Health Information Software;
 DHS = District Health Services;
 DTap-IPV-Hib-HBV = Diphtheria, Tetanus, Inactivated Polio Vaccine, Haemophilus Influenza B, Hepatitis Vaccine;
 GHS = General Household Survey; ISHP = Integrated School Health programme;
 LG = Local Government; NCEMD = National Committee for Confidential Enquiries into Maternal Deaths;
 NCDs = non-communicable diseases; NDoH = National Department of Health;
 NHLS = National Health Laboratory Service; NW = North West;
 OPD = outpatient department; OPV = oral polio vaccine;
 PCR = polymerase chain reaction; PCV = Pneumococcal conjugate vaccine;
 PDE = patient day equivalent; PHC = primary health care;
 PR = programme; RV=Rotavirus vaccine; StatsSA = Statistics South Africa;
 YLLs = years of life lost.



HEALTH SYSTEMS TRUST

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