

Definitions and sources (abbreviations given in footnote)

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
Finance	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, DHS population data and StatsSA GHS medical scheme coverage
	Provincial and local government primary health care (PHC) expenditure per capita (uninsured population)	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, DHS population and StatsSA GHS medical scheme coverage
	Provincial and local government PHC 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, DHS 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 patients that have access to a medical practitioner	Percentage of PHC facilities, out of all facilities that have conducted a status determination, with patients that have access to a medical practitioner	Number of fixed PHC facilities with patients who have access to a medical practitioner	Number of PHC facilities that conducted a status determination on version 15 as indicated in column G of the Ideal Clinic Assessment Tool	DHIS NDoH5, Ideal Clinic review tools
Management Inpatients	Average length of stay (district hospitals)	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 (data for district hospitals only)
	Inpatient bed utilisation rate (district hospitals)	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 (data for district hospitals only)
Management Inpatients (cont)	Expenditure per Patient Day Equivalent (district hospitals)	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) (data for district hospitals only)
	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 (data for district hospitals only)
	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
	Delivery by Caesarean section rate (district hospitals)	Delivery by Caesarean section as proportion of total deliveries in health facilities	Delivery by Caesarean section	Delivery in facility total	DHIS NDoH5 (data for district hospitals only)
	Stillbirth rate in facility	Number of stillbirths, per 1 000 total births	Number of stillbirths	Total number of births	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
	Maternal mortality ratio institutional	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 1st visits before 20 weeks rate	Women who have a booking visit (1st 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
	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
	Birth PCR testing coverage	Proportion of HIV-exposed neonates who received an HIV PCR test within the first six days of life	PCR tests performed in neonates within 6 days of age	Live births to HIV-positive women	DHIS NDoH5, NHLS
PMTCT	Percentage PCR tests positive within the first six days	Infants tested PCR positive for the first time within 6 days of birth as proportion of infants PCR tested within 6 days of birth	PCR tests positive for infants within 6 days of birth	Number of PCR tests done in infants within 6 days of birth	NHLS
	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-IPV/Hib 1,2 and 3, HepB 1,2 and 3 (or DTaP-IPV-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 2nd dose coverage	Proportion of children 1 year (12-23 months) who received measles 2nd dose, normally at 18 months	Measles 2nd dose	Population 1 year	DHIS NDoH5

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
	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
	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 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
Reproductive Health	Couple year protection rate	Women protected against pregnancy using modern contraceptive methods, including sterilisations, as a 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
	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
TB	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 (all TB)	Proportion TB clients (ALL types of TB) cured plus those who completed treatment	TB client cured OR completed treatment	TB (new pulmonary) client initiated on treatment	NDoH TB Directorate
	TB death rate (all TB)	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 cure rate (new pulmonary smear-positive)	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)	Number of initially smear-positive PTB 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
	TB loss to follow up rate (new pulmonary smear-positive)	Proportion of new smear-positive PTB patients who default on treatment	Number of initially smear-positive PTB patients who default on treatment	Total number of new PTB smear-positive cases started on treatment during the specified time	NDoH TB Directorate
	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 MDR treatment success rate	TB MDR client successfully completing treatment as a proportion of TB MDR confirmed clients started on treatment	Number of patients who completed treatment or were cured	All TB patients in cohort	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
	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
	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
	Percentage of TB cases with known HIV status (ETR.net)	Percentage of TB cases with known HIV status	TB cases with known HIV status	TB cases	NDoH TB Directorate
NCDs	Hypertension prevalence rate (crude)	Percentage of people with hypertension (raised BP or on treatment) of the adult population (15 years and older)	Number of people with hypertension (raised BP or on treatment)	Adult population (15 years and older)	National Income Dynamic Study
	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
	Diabetes mellitus incidence	Newly diagnosed diabetes clients initiated on treatment per 1 000 population	Diabetes client treatment new	Population total	DHIS NDoH5
Burden of Disease	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
	Percentage of deaths due to HIV or TB	Percentage of deaths due to HIV or TB	Number of deaths due to HIV or TB	Total number of deaths	StatsSA
	Percentage of deaths due to injuries	Percentage of deaths due to injuries	Number of deaths due to injuries	Total number of deaths	StatsSA
	Percentage of deaths due to non-communicable diseases	Percentage of deaths due to NCDs	Number of deaths due to NCDs	Total number of deaths	StatsSA

ANC = antenatal care; 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; DTP-Hib = diphtheria, tetanus, pertussis and Haemophilus influenzae type B vaccine; DTaP-IPV = Diphtheria, Tetanus, Pertussis, Inactivated Polio Vaccine & Haemophilus Influenza B combined; DTaP-IVP-Hib-HBV = Diphtheria, Tetanus, Inactivated Polio Vaccine, Haemophilus Influenza B, Hepatitis Vaccine; GHS = General Household Survey; HepB = Hepatitis B; ISHP = Integrated School Health programme; LG = Local Government; NCCEMD = 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

For more information:

Web: <http://www.hst.org.za>

Email: webmaster@hst.org.za

Fax: 086 588 0394

Or contact one of our offices:

Durban (Head Office)

34 Essex Terrace, Westville, 3630

Tel: +27 (0)31 266 9090

Johannesburg

1st Floor, Block J, Central Park,
400 16th Road, Midrand, 1682

Tel: +27 (0)11 312 4524

Cape Town

Block B, Aintree Office Park,
Doncaster Road, Kenilworth, 7700

Tel: +27 (0)21 762 0700