



Draft report on

MINIMUM DATASETS

by

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September 2008

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Glossary

| Abbreviation | Name |
|---------------------|--|
| CDT | Current Dental Terminology |
| DRG | Diagnostic Related Grouping |
| ICD-10 | International Classification of Diseases 10th Revision |
| ICPC | International Classification of Primary Coding |
| ICU | Intensive care unit |
| LOS | Length of stay |
| MSA | Medical savings account |
| NAPPI | National Pharmaceutical Product Interface |
| NHRPL | National Health Reference Price List |
| SAMA | South African Medical Association |
| WHO | World Health Organization |

1. Background

This document serves as a process of obtaining input from stakeholders about standard measurements of member access to healthcare services.

Although the private health delivery system involves private and public sector interventions, it is necessary to assess their impact and roles on the process of health financing and health care provisioning to facilitate decisions to improve healthcare service delivery of the private health system.

This structural perspective to the process of providing and accessing healthcare services becomes ever more important in terms of the endeavour of the national health policy to integrate private and public interventions.

We seek to create and improve data collection that is sensitive to a set of criteria which provide accurate information on access to healthcare, attributable to the provision of healthcare services for which benefits were provided by medical schemes (risk and medical savings accounts). The purpose of data collection is to monitor healthcare expenditure and its predictors. It is an expansion of the current minimum dataset as per the annual reporting standards.

2. Objectives

This document seeks to review minimum datasets for data collection on the following healthcare services:

- primary care service benefits
- in-hospital and out-of-hospital benefits
- medicines, appliances and prostheses
- service providers (including hospitals and medical specialists and practitioners)

This document seeks to address opportunities like:

- developing standard definitions and terminology for healthcare benefits covered by schemes;
- standardising performance measures across medical specialties and healthcare settings to ensure that data gathered supports the information needs of providers, schemes, public health researchers, policy makers and other users to make informed decisions; and
- developing guidelines for establishing, validating and obtaining consensus on data standardisation.

3. The criteria for collecting minimum datasets

The collected data should:

- be **comprehensive** in terms of service providers and facilities providing health interventions for beneficiaries of medical schemes;
- be **complete** in relation to expenditure of private health insurance funds (benefits paid from the risk pool and medical savings account);
- allow for **consistency** and **comparability** (for cross sectional and time series analysis);
- allow for **common understanding** of what constitutes aggregated and disaggregated data;
- be aggregated to be **compatible** with national and economic indicators;
- provide **timely** and **accurate data** for decision-making purposes;
- consist of **variables that are sensitive** and **relevant** for **policy making** and monitoring of recent legislative and policy changes in the healthcare industry;
- be able to assess and evaluate the **trends** and **expenditure** of private healthcare delivery system interventions and services;
- record transactions across entities in the healthcare system and these should be **exhaustive** and **mutually exclusive**;
- be **replicable** (stable over time); and
- **accurate**.

Sections below provide a framework on how the minimum dataset is structured and give brief descriptions of the predictors of healthcare needs and realised utilisation measures.

The categories of assessment are:

- utilisation of healthcare services
- healthcare expenditure
- medicines

4. Expenditure and utilisation (assessing realised access)

Data needs to be submitted by utilising the health condition (diagnosis) ICD-10 codes. The reporting standards for the CDL conditions will remain unchanged. The addition of ICD-10 reporting standards would be in line with the 298 categories as per the ICD-10 tabulation list for morbidity.

Except for CDL conditions, all diagnostic data needs to be reported for the top 20 most prevalent diagnoses, as per the ICD-10 special tabulation list for morbidity.

This reporting level is an intermediary standard and the level of specificity will increase in future to accommodate the level 3-5 character ICD-10 codes to eventually incorporate all diagnostic information available at option level.

It is currently impossible to collect and analyse all diagnostic data up to this level of specificity due to logistical limitations.

Measure actual access to healthcare services. Depending on the service provider, procedural services should be reported according to prevailing procedural codes.

4.1. GP services

- Number of upward referrals from a GP to a specialist in options where pre-authorization is required or where gate-keeping occurs
- Expenditure and utilisation related to CDL chronic conditions (consultations, procedures, investigations, medicines)
- Expenditure and utilisation related to CDL chronic conditions limited to consultations (NHRPL tariff items 0190-0192)
- Expenditure and utilisation for in-hospital consultations for NHRPL items 0173-0175
- Expenditure and utilisation for top 20 procedures as NHRPL procedure systems and sub-categories classification
- Expenditure and utilisation for top 20 diagnoses as ICD-10 special tabulation list for morbidity
- Expenditure and utilisation for top 20 discharge diagnoses as ICD-10 special tabulation list for morbidity

4.2. Dental and medical specialists

Expenditure and utilisation for:

- out-of-hospital specialist consultations (for **each** specific specialist type per discipline code as per current Annual Report standards, except discipline 022 psychiatry) for NHRPL tariff items 0190-0192
- out-of-hospital specialist psychiatry consultations (limited to discipline 022 psychiatry as per current Annual Report standards) for NHRPL tariff items 0161-0164
- in-hospital specialist consultations (for **each** specific specialist type per discipline code as per current Annual Report standards, except discipline 022 psychiatry) for NHRPL tariff items 0173-0175, 0109, 0178-0179 and 0111
- in-hospital specialist psychiatry consultations (limited to discipline 022 psychiatry as per current Annual Report standards) for NHRPL tariff items 0166-0169
- in-hospital specialist consultations (for **each** specific specialist type per discipline code as per current Annual Report standards, except discipline 022 psychiatry) at intensive care or high-care level for NHRPL tariff items 1204-1210

- total related to CDL chronic conditions (consultations, procedures, investigations, medicines)
- related to CDL chronic conditions limited to consultations (NHRPL tariff items 0190-0192)
- top 20 procedures as NHRPL procedure systems and sub-categories (for **each** specific specialist type per discipline code as per current Annual Report standards)
- top 20 diagnoses as ICD-10 special tabulation list for morbidity (for **each** specific specialist type per discipline code as per current Annual Report standards)
- top 20 discharge diagnoses as ICD-10 special tabulation list for morbidity (for **each** specific specialist type per discipline code as per current Annual Report standards)

4.3. Hospitals and same-day-surgery facilities

Definitions:

- Hospital admissions = admitted for more than 24 hours (LOS)
- Same-day admissions = admitted for less than 24 hours (LOS) (e.g. same-day procedures)
- Total admissions = hospital admissions + same-day admissions

Expenditure and utilisation for:

- private hospital facilities in total and per geographic region
- top 20 diagnoses as ICD-10 special tabulation list for morbidity for private hospitals
- top 20 discharge diagnoses as ICD-10 special tabulation list for morbidity for private hospitals
- top 20 procedures as per prevailing procedural code for private hospitals

Private hospitals for:

- private hospital intensive care units (specialised ICU, neonatal ICU and ICU)
- private hospital high-care units (high care, neonatal high care A & B)
- private hospital private wards
- private hospital general wards
- private hospital services for all disciplines per geographic region
- private hospital services for all disciplines paid per age
- private hospital services for all disciplines per race (ethnic group)
- private rehabilitation hospitals, discipline 059
- unattached operating theatres or day clinics, discipline 076 and 077

- private nurses, community health services, alcohol and drug rehabilitation, hospice, mental health institutions and step-down facilities per age group
- private nurses, community health services, alcohol and drug rehabilitation, hospice, mental health institutions and step-down facilities per geographic region per discipline
- private nurses, community health services, alcohol and drug rehabilitation, hospice, mental health institutions and step-down facilities per geographic region

Public hospitals for:

- public hospital facilities (for specific discipline as per current Annual Report standards) in total and per geographic region
- top 20 diagnoses as ICD-10 special tabulation list for morbidity for public sector facilities (for each specific facility type per discipline code as per current Annual Report standards)
- for public hospital services for all disciplines per geographic region
- for public hospital services for all disciplines paid per age group
- for public hospital services for all disciplines per race (ethnic group)
- claim pattern by month per discipline, all providers
- claim pattern by age per discipline, all providers

Diagnoses adjusted for demographic characteristics

Health expenditure and utilisation for:

- top 20 diagnoses for out-of-hospital services for all disciplines paid from the risk pool
- top 20 discharge diagnoses for out-of-hospital services for all disciplines paid from the risk pool
- top 20 diagnoses for out-of-hospital services for all disciplines paid from medical savings account
- top 20 discharge diagnoses for out-of-hospital services for all disciplines paid from medical savings account
- top 20 diagnoses for out-of-hospital services for all disciplines (including facilities such as step-down, hospice etc.) per geographic region
- top 20 diagnoses for out-of-hospital services for all disciplines paid per age
- top 20 diagnoses for out-of-hospital services for all disciplines race (ethnic group)

4.4. Medicines

In-hospital (hospital and ambulatory setting):

Expenditure and utilisation for:

- all medicines in-hospital in total (current Annual Report)
- expenditure and utilisation for all medicines in-hospital in total (current Annual Report) per discipline
- all medicines in-hospital in total (current Annual Report) per geographic region
- all medicines in-hospital in total (current Annual Report) per geographic region per age group
- all medicines in-hospital for ward stock
- all medicines in-hospital for theatre stock
- all medicines in-hospital for TTO (to-take-home medicine)
- all prostheses (internal and external dispensed or utilised) in-hospital
- all appliances dispensed in-hospital
- number of scripts filled
- prevalence of use (utilising beneficiaries as percentage of total beneficiaries)
- intensity of use (items per utilising beneficiary), items dispensed

Out of hospital:

Expenditure and utilisation for:

- all medicines (acute and chronic) dispensed out-of-hospital in total (current Annual Report)
- medicines dispensed out-of-hospital only for CDL conditions in total
- all medicines (acute and chronic) dispensed out-of-hospital in total (current Annual Report) per geographic region
- all medicines (acute and chronic) dispensed out-of-hospital in total (current Annual Report) per age group
- all out-of-hospital medicines per service provider discipline (e.g. general practitioners, medicines etc.)
- number of scripts filled
- prevalence of use (utilising beneficiaries as percentage of total beneficiaries)
- intensity of use (items per utilising beneficiary), items dispensed

Other facilities:

Expenditure and utilisation for:

- all medicines in step-down facilities
- all medicines in hospice facilities
- all medicines in-hospital in total (current Annual Report) mental institutions
- all medicines in-hospital in total (current Annual Report), alcohol and drug rehabilitation

Oncology-related medicines used in chemotherapy *(schemes to use ICD-10 morbidity tabulation list codes ranging from 058 to 089):*

Expenditure and utilisation for:

- all chemotherapy medicines dispensed both out-of-hospital (medicines, general practitioners and specialists) and in-hospital (all ambulatory and hospital facilities) in total
- all chemotherapy medicines dispensed both out-of-hospital (medicines, general practitioners and specialists) and in-hospital (all ambulatory and hospital facilities) per geographic region
- all chemotherapy medicines dispensed both out-of-hospital (medicines, general practitioners and specialists) and in-hospital (all ambulatory and hospital facilities) per age group

4.5. Evaluating adequacy to healthcare access

As a result of applying appropriate criteria to the minimum datasets, we seek to generate robust estimates relating to trends of access and monitor changes that impact on the health delivery system or process:

- hospital admissions
- length of stay (LOS)
- LOS for top 20 diagnoses and top 20 procedures v average LOS claimed for actual hospitalisation (subject to availability of data)
- average LOS of the top 20 diagnosis in-hospital admissions per geographic region
- average LOS of the top 20 procedures performed in-hospital admissions per geographic region
- coefficients of variance on the numerators and denominators of the above ratios (to identify unusual variance in activities)

5. Classification of health services (health functions)

Services of rehabilitative care (ICD-10 coding range Z50.0-Z50.9)

Expenditure and utilisation for:

- in-hospital and ambulatory (including step-down) facilities per discipline
- for out-of-hospital services per discipline

Services of dental care (dentist and dental specialist's disciplines only)

Expenditure and utilisation for:

- in-hospital and ambulatory (including step-down) facilities per dental discipline for ICD-10 morbidity list ranging from 180 to 182
- out-of-hospital services per discipline for ICD-10 morbidity list ranging from 180 to 182

Services of supplementary and allied health professionals

Expenditure and utilisation for:

- all supplementary and allied health professionals (as per Annual Report) per discipline
- all supplementary and allied health professionals (as per Annual Report) per geographic region per discipline
- all supplementary and allied health professionals (as per Annual Report) per age group per discipline
- all supplementary and allied health professionals (as per Annual Report) per gender per discipline
- items dispensed or provided for all supplementary and allied health professionals (as per Annual Report) per discipline

6. Data specifications

This section highlights some of the key variables as per our Annual Report as well as new variables.

6.1. Access to health

- total number of members
- total number of dependants
- total number of beneficiaries

Age

Age bands are to be grouped using the WHO classification for consistency with the National Department of Health.

Format:

<1; 1-4; 5-14; 15-24; 25-34; 35-44; 45-54; 55-64; 65-74; > 75

Age should be determined as at previous birthday of member or dependant.

Gender

There are two categories for gender: male and female.

Geographic distribution

- Distribution of beneficiaries determined at provincial level

6.2. Expenditure and utilisation

6.2.1. Utilisation of services

Please see various suggestions on additional datasets mentioned earlier in this document.

Out-of-hospital

General practitioners

- Number of beneficiaries visiting GPs
- Number of beneficiaries visiting a GP at least once a year
- Total number of visits to GPs

Dentists

- Number of beneficiaries visiting dentists at least once a year
- Total number of visits to dentists

Other services

Medicines

- Number of claims of GP-dispensed medicines
- Number of claims of pharmacy-dispensed medicines
- Number of claims of medical specialists
- Number of claims of supplementary and allied support health professionals
- Number of claims of other health professionals
- Total number of scripts filled
- Total number of items dispensed

Dental and medical specialists services

- Medical services: number of beneficiaries visiting medical specialists at least once per year
- Total number of visits to a medical specialist
- Dental services: number of beneficiaries visiting dental specialists at least once per year

Supplementary and allied health professionals

- Number of beneficiaries visiting supplementary and allied health professionals at least once per year
- Total number of visits to supplementary and allied health professionals

Medical investigations

- Number of beneficiaries receiving MRI & CT scans
- Number of MRI & CT scans administered
- Number of beneficiaries receiving PET scans
- Number of PET scans administered
- Number of beneficiaries receiving angiograms
- Number of angiograms administered
- Number of beneficiaries receiving bone density scans
- Number of bone scans administered

Hospitalisation

In-hospital

Provincial hospitals

- Number of beneficiaries admitted (unique admissions)
- Number of admissions (total admissions)
- Length of stay
- Number of admissions for ICU, high care, general ward

Private hospitals

- Number of beneficiaries admitted (unique admissions)
- Number of admissions (all admissions)
- Length of stay
- Number of admissions for ICU, high care, general ward

Added variables

- Number of beneficiaries by the top 20 diagnosis (as per ICD-10 special, split between PMBs and non-PMBs)
- Number of beneficiaries by the top 20 discharge diagnosis (as per ICD-10 special, split between PMBs and non-PMBs)
- Number of beneficiaries by the top 20 procedures (as per prevailing procedural code for private hospitals)
- Day clinics and operation theatres: number of all admissions

Medicines

- Number of claims of GP-dispensed medicines
- Number of claims of pharmacy-dispensed medicines
- Number of claims of medical specialists
- Number of claims of supplementary and allied support health professionals
- Number of claims of other health professionals
- Total number of scripts filled
- Total number of items dispensed

6.2.2. Expenditure on services

Out-of-hospital

General practitioners

- Amount paid for beneficiaries visiting GPs
- Amount paid for beneficiaries visiting a GP at least once a year
- Member portion for GP visits

Added variables

- Amount paid per diagnosis (top 20 diagnosis as ICD-10 special tabulation list for morbidity)
- Amount paid per procedure (top 20 as per NHRPL procedure systems and sub-category classification)

Dentists

- Amount paid for beneficiaries visiting dentists
- Amount paid for beneficiaries visiting a dentist at least once a year
- Member portion of medical expenditure on dentists

Other services

Medicines

- Amount paid for medicines dispensed by a GP
- Amount paid for medicines dispensed by pharmacists
- Amount paid for medicines dispensed by medical specialists
- Amount paid for medicines dispensed by supplementary and allied health professionals
- Amount paid for medicines dispensed per discipline by age group, gender and race

- Amount paid for medicines dispensed by other professionals
- Amount paid per items dispensed
- Member portion of doctor-dispensed medicines

Dental and medical specialists services

- Amount paid for beneficiaries visiting medical and dental specialists
- Member portion of medical expenditure on medical specialists

Added variables:

- Amount paid per diagnosis (top 20 diagnosis as ICD-10 special tabulation list for morbidity)
- Amount paid per diagnosis (top 20 discharge diagnosis as ICD-10 special tabulation list for morbidity)
- Amount paid per procedure (top 20 as per NHRPL procedure systems and sub-category classification)

Supplementary and allied health professionals

- Amount paid for beneficiaries visiting supplementary and allied health professionals
- Member portion of medical expenditure on supplementary and allied health professionals

Medical investigations

- Amount paid for beneficiaries receiving:
 - PET scans
 - MRI scans
 - bone density scans
 - angiograms

Hospitalisation

- Amount paid for beneficiaries admitted in day clinics, private and provincial hospitals
- Amount paid for beneficiaries admitted to ICU, high care, general ward
- Member portion of medical expenditure on day clinics, private and provincial hospitals

Added variables:

- Amount paid per diagnosis by age group (top 20 diagnosis as per ICD-10 special tabulation list for morbidity for private hospitals)

- Amount paid per discharge diagnosis by age group (top 20 diagnosis as per ICD-10 special tabulation list for morbidity for private hospitals)
- Amount paid for a medical procedure by age group (top 20 as per prevailing procedural code for private hospitals)

6.3. Mortality

Deaths in medical schemes

- Overall number of deaths in a scheme by type of hospital facility

Preventative health

Mammograms

- Frequency of mammograms in women between the ages of 40 and 59 (inclusive) – one per year

Pap smears

- Frequency of pap smears in women over 21 years of age

Table 1: Medical specialists and other specialist services

| Medical specialists | Sub-specialty |
|-------------------------------------|----------------------|
| Dermatologist | |
| Gynaecologist | |
| Pulmonologist | |
| Physician | |
| Gastroenterologist | |
| Neurologist | |
| Cardiologist | |
| Psychiatrist | |
| Medical oncologist | |
| Neurosurgeon | |
| Nuclear medicine | |
| Ophthalmologist | |
| Clinical haematology | |
| Orthopaedic surgeon | |
| Otorhinolaryngologist | |
| Rheumatology | |
| Paediatrician | |
| Paediatric cardiologist | |
| Specialist physical medicine | |
| Plastic reconstructive surgery | |
| Radiation oncology | |
| Surgeon | |
| Thoracic surgeon | |
| Urologist | |
| Clinical support specialists | |
| Anaesthesiologist | |
| Anaesthetists | |
| Pathologists | anatomical |
| | chemical |
| | clinical |
| | forensic |
| | haematology |
| | medical microbiology |
| | virological |
| | microbiological |
| Other | |
| Dental specialists | |
| Dental therapist | |
| Dental technician | |
| Maxilla, facial & oral surgeon | |
| Oral pathologist | |
| Orthodontist | |
| Periodontist | |
| Prosthodontist | |
| Dental therapist | |

Supplementary and allied health professionals

| | |
|---|--|
| Art therapy | |
| Audiologists | |
| Biokinetics | |
| Clinical technologists | |
| Dietician | |
| Hearing aid acoustician | |
| Laboratory technologist | |
| Medical scientists | |
| Occupational therapy | |
| Optometrist | |
| Orthoptist | |
| Pharmacists | |
| Physiotherapist | |
| Podiatrist | |
| Psychologist | |
| Radiographer | |
| Private nurse | |
| Social workers | |
| Speech therapist | |
| Acupuncture and Chinese medicine | |
| Ayurvedic practitioner | |
| Chiropractor osteopath | |
| Homeopath | |
| Naturopath physiotherapist | |
| Therapeutic massage, aromatherapy & reflexology | |
| Other | |

In-hospital services

| | |
|--|---|
| Hospitals: unattached operating theatres / day clinics | Theatre fees |
| | Consumables |
| | Medicines dispensed |
| | |
| Hospitals: other private hospitals | Theatre fees Ward fees <ul style="list-style-type: none"> • ICU • High care • General ward Theatre fees |
| | Consumables |
| | Medicines dispensed |
| Hospitals: state / provincial hospitals | Theatre fees Ward fees <ul style="list-style-type: none"> • ICU • High care • General ward Theatre fees |
| | Consumables |
| | Medicines dispensed |

Other benefits

| | |
|--------------------------------|---------------------------------|
| Ambulance service | Clinical services Other |
| Ambulance intermediate service | Community health services |
| Ambulance service advanced | Drug and alcohol rehabilitation |

| | |
|----------------------------|--------------------------------|
| Blood courier | Group practice |
| Blood transfusion services | Hospice |
| Home oxygen | Mental health institution |
| Appliances | Sub-acute step-down facilities |
| Prostheses | Other |

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