A District Hospital Service Package for South Africa

a set of norms and standards

Department of Health

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Contents

INTRODUCTION

1. Introduction

This set of norms and standards is intended to support the development of district hospitals as part of the drive to improve local health services for all people.

The District Health System (DHS) has been adopted as the vehicle to deliver *Comprehensive Primary Health Care Services* in South Africa. These services include community-based services, services available at mobile/fixed clinics and community health centres. ***District hospitals*** also form part of the district health system in the new policy. This means that services provided in ***district hospitals*** will be fully integrated with services provided in primary care. The implication is that the governance, management and functions of district hospitals should relate to the governance, management and functions of the district health system as a whole. District management teams have the task of finding ways in which the hospital-based resources can be harnessed to strengthen the delivery of all primary care services. This document should help this process.

2. Application

The set of norms and standards listed aims to be comprehensive enough to be used: --

- By local staff to help assess their own performance and that of their hospital.
- By communities who are able to see the range and quality of district hospital services to which they are entitled.
- As planning guidelines by district and provincial health planners to help assess the unmet needs of their population and draw up plans to bring services up to national standards.
- By provincial governments to guide resource allocation via the conditional grant mechanism.

This wide range of uses requires the document to be available in different formats and selecting particular sections. Once this core document is published, it will be widely distributed to all stakeholders. Components can for example be adapted for use as checklists for local staff.

3. The role of the district hospital

The district hospital plays a pivotal role in supporting primary health care on the one hand and being a gateway to more specialist care on the other. The district hospital provides level1 (generalist) services to in-patients and outpatients (ideally on referral from a community health center or clinic). The hospital has between 30 and 200 beds, a 24-hour emergency service and an operating theatre. Generalists from a range of clinical disciplines provide the services. In some circumstances primary health care services are rendered where there is no alternative source of this care within a reasonable distance.

The hospital also plays a key role in supporting clinical service delivery in the district as a whole. The following are examples:

- Human resource matters
  - Human resource development such as in–service clinical training
  - Sharing scarce human resources such as pharmacists and doctors
- Financial matters

  - Procurement and financial administration of PHC facilities
- Information management
  - The use of PHC data in hospital service planning and hospital morbidity and mortality information to support PHC service planning
  - Research activities
- Laboratory services
- Transport services
- Pharmaceutical services
- Equipment supplies
- Organising the technical equipment maintenance system

4. The range of district hospital services

According to the World Health Organization's functional definition, district hospitals should provide diagnostic, treatment, care, counseling and rehabilitation services. It should cover the following clinical disciplines at generalist level:

* Family Medicine and Primary health care
* Medicine
* Obstetrics
* Psychiatry
* Eye care
* Rehabilitation
* Surgery
* Paediatrics
* Geriatrics

The modern approach is to look at broad programmes of care such as reproductive health, and it is these programmes that have been used to categorise services described in this document. Appendix 2 is an indicative list of services proposed by the task team looking at the primary care package including district hospital services. The list is not fixed, as services should be shaped by the needs of the catchment population being served. Many factors may influence the capacity of a hospital to render the full range of services. The services listed however are minimums towards which each hospital and its staff should strive.

Not every district hospital function has been fully documented e.g. environmental health, support services (X-ray, laboratories, mortuaries etc.). Currently work is underway to define the norms and standards for environmental health and occupational hygiene in district hospitals. These are expected to cover important aspects such as infection control, medical waste management and hygienic food handling. These chapters will be included once they are ready.

Medico-legal services are being transferred from SAPS to the health department. This offers the opportunity to reconsider the quality required of these important services. The range and standards of such services, which will be provided in selected district and regional hospitals, are being reviewed. Norms and standards will be included when the review is complete. In the mean time medico-legal services required of all district hospitals are mainly found in the chapter on trauma and emergency.

5. Challenges facing district management teams

As ***district hospitals*** become an integral part of the district health system, district management teams will need to seek ways to ensure that:

- The district hospital supports and provides clinical leadership to the network of primary care facilities, which are not usually managed by the hospital.
- The district hospital helps to make the referral system work well. The Primary Health Care approach dictates the referral system in a local area. Clear lines of and criteria for referral between facilities will help to ensure equity of access and appropriate treatment at all levels of care. The district hospital can help by
  - directing self-referred patients to a nearby primary health care facility, or if necessary, setting up a clinic in the proximity of the hospital, designed and run in a manner which is undistinguishable from any other primary health care facility or community health care elsewhere in the district
  - Only seeing outpatients who are either referred from the primary health care facility network, when functioning adequately, or from health professionals practicing in the community. The exceptions are emergency cases. The follow-up patients that are usually seen in the outpatient department of a district hospital are those patients referred for the intermittent management of health problems that require hospital-based services not readily available at a primary health care facility.

  (According to the local situation and context, some outpatient departments in district hospitals may function as primary health care facilities as well.)

6. The process used to develop the norms and standards

Two different district hospital task teams were constituted. The first was established in 1997/8 and was a joint team comprised of members of the National District Health System Committee and the National Hospital Coordinating Committee. This team was assembled following a mandate by the Provincial Health Restructuring Committee (PHRC) whose members were concerned that the vital role of district hospitals was being forgotten, squeezed between primary care, which as the top national priority is receiving substantial attention and investment, and the high profile regional and tertiary hospitals.

This joint task team had as part of its mandate to define the services that will be available and rendered at district hospitals. The joint task team used the WHO indicative list as a basis and sought recommendations from a number of reference groups. All directorates in the National Department of Health added their comments and inputs. A second round of consultation took place. This document was presented and accepted in 1998 by:

a) The National District Health Systems committee;
b) The National Co-ordinating Committee;
c) The Senior Management Team of the National Department of Health.

Having identified the range of services to be provided, another national task team comprising experts working in district hospitals has undertaken the production of the norms and standards for these district hospital services.

7. The choice of norms and standards

For the purpose of this document norms and standards are defined thus:

A NORM is defined as ***a statistical normative rate of provision or measurable target outcome over a specified period of time.***

A STANDARD is defined as ***a statement about a desired and acceptable level of health care***.

The standards do not specify ***how*** the services are to be provided but ***what*** level of services are required in district hospitals to best meet the health needs of the nation. For this reason national standards about facilities and staffing norms are not offered.

The norms and standards are largely derived from existing national policy documents or, if unavailable, from other authoritative sources such as WHO and research work undertaken in the country. All the norms and standards are verifiable (some more easily than others) by staff providing the service. An attempt has been made to ensure that the standards are practical, essential and comprehensive, and describe the range of services that should be available to all South Africans.

Standards are best developed in incremental stages and this document should be seen as a living document, maturing with experience. As such, it represents the first stage of this process. Experience in using the document will need to provide the feedback to revise it in two years time.

Standard setting has been based on two frameworks:

- A framework of service inputs, processes, outputs and outcomes.
- Dimensions of quality -- acceptability, accessibility, appropriateness, continuity, effectiveness, efficiency, equity, interpersonal relations, technical competence and safety.

The most important dimensions have been chosen for each service.

8. Content

Acknowledging the fact that health care to patients is integrated and holistic, a programme-based approach has been followed with nine chapters covering each programme of services, taken in life-cycle order. Patients often have multiple problems, so it is important that district hospital services are rendered in an integrated manner.

The document is presented as follows:

- An introduction explaining the background to the document
- A chapter on management
- Chapters on the clinical programmes.

The chapters on clinical programmes have three paragraphs. The first describes the service to be provided. The second paragraph describes the norms, chosen to represent key measures of what is required. All district hospitals should be aspiring to measure and reach these norms.

The third paragraph describes the standards for each service and is divided into 9 sections. The first three sections describe the essential written material, equipment, supplies and medicines required. Successful performance to meet these standards requires good organisation and logistics.

Sections 4 and 5 are perhaps the most important of all in describing the required competence of staff, without which services will be of poor quality. These sections will be of help to individual professionals as they assess their own capabilities against what is required of them. They will also be of help to managers and training departments in offering a backbone for training curricula and supervisory support.

Sections 6 - 10 relate to other professional tasks required which are not directly related to individual patient care. They are nevertheless important, as they are to do with improving the health of the local community and supporting primary health care.

9. Acknowledgements

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  The National Department of Health thanks all these contributors.

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10. Conclusion

The document is a first attempt to develop norms and standards for district hospitals. It is not perfect and can be improved with your help. The task team would appreciate any input to the chapters included, as well as any other aspect not covered in this document. Kindly forward your inputs for attention: Director, Quality Assurance Private Bag X828 Pretoria 0001. Fax (012) 323 5053; Email Claasl@health.gov.za

Chapter prepared by Ms Assy Moraka

Managing a district hospital within the district health system

The district hospital is an integral part of the district health system. The hospital management team therefore forms part of overall district management involving them to play a key role in health reform at district level.

Management Teams need to
- continually improve the delivery of primary health care services in a safe and healthy way.
- find ways in which the hospital-based resources can optimally be harnessed to strengthen the DHS.

The management environment

There are two important National Policies that define the context for hospital management. They are the Batho Pele programme and the Patients Charter.

The principles of the Batho Pele programme are the following:
- Consultation with the public.
- The setting and communication of service standards.
- Equal access to services.
- Courtesy to the public.
- Full, accurate information about services to the public.
- Openness and transparency.
- Redress if promised standard of services is not delivered.
- Value for money - services to be rendered economically and efficiently.

The Patients Charter lists the responsibilities of both providers and patients. According to this policy every patient has the right to:
- A healthy and safe environment.
- Access to health care.
- Confidentiality and privacy.
- Informed consent.
- Referral for second opinion.
- Exercise choice in health care.
- Continuity of health care.
- Participate in decision-making that affects his/her health.
- Be treated by a named health care provider.
- Refuse treatment.
- Knowledge of their health insurance / medical aid scheme policies.
- Complain about the health service they receive.

The patient has the responsibility to:
- Living a healthy lifestyle
- Care and protect the environment
- Respect the rights of other patients and health staff
- Utilise the health system optimally without abuse
- Know the health services available and what they offer
- Provide health staff with accurate information for diagnosis, treatment, counselling and rehabilitation purposes
- Advise health staff on his or her wishes with regard to death
- Comply with the prescribed treatment and rehabilitation procedures
- Ask about management costs and arrange for payment

- Take care of the patient carried health cards and records

District hospital managers have to operate in a very challenging situation balancing community needs and available resources. An enabling environment for managers includes the following:

- Appropriate staffing and funding
- Legislation appropriate for effective operation
- Proper decentralisation of decision-making
- Human resource development programmes
- Patients fulfilling their responsibilities according to the Patients Charter.

Resource materials that can assist district hospital management teams

- How to monitor and manage absenteeism in hospitals (Kwik Skwiz #25 – on www.hst.org.za).
- Can the management of services be separated from managing its finances? (Kwik Skwiz #21).
- First Lady of the Northern Cape: A situation analysis of a district hospital (source: Health Systems Trust).
- Guidelines to conduct a district health expenditure review (source: Health Systems Trust; National Department of Health).
- Mapping for PHC (To determine the catchment population; source: Management Science for Health-Equity project).
- Referrals between levels of primary health care in the Eastern Cape 1999, Equity.
- Guide to measure client satisfaction (source: Health Systems Trust).
- Hospital Strategy Project (National Department of Health).
- Hospital data collection Form ID: HA01D; Hospital capacity and Patient Throughput (National Department of Health).
- Eastern Cape Assessment Tool of priority management and clinical functions.
- Patients Charter (National Department of Health).
- The National Drug Policy (National Department of Health).
- Managing Drug Supply (Management Sciences for Health).

Core management standards

Eight core management standards are listed in the box below. Criteria are then defined for each of them.

Core Management Standards

1. The hospital has a defined vision, which is in line with and draws from the District, Provincial and National visions.
2. The hospital management works according to an Operational/ Service Plan to achieve the vision.
3. The community acts as a shareholder in hospital management.
4. Efficient and effective management systems are in place.
5. Hospital resources are used for the benefit of patients and the District Health System.
6. The hospital has clear policies and procedures to guide management and service provision.
7. The hospital has programmes to improve quality.
8. Management encourages teamwork and promotes an enabling environment for staff.

1. The hospital has a defined vision, which is in line with and draws from the District, Provincial and National visions.

Standards:

a. The hospital, district and community define what it is that they want to optimally achieve in the District.
b. A vision is developed for the hospital that is in line with, and serves the District, Provincial and National vision.
c. A mission statement, defining the methodology for achieving the vision as well as the core values that are to be adhered to, is drawn up.
d. Vision is written in terms of what the hospital wants to achieve for patients and the community as a whole and not only the in-patients.

2. The hospital management provides leadership and works according to an Operational Plan.

Standards:

a. An Operational Plan is available for the current year.
b. The Operational Plan is within the strategic framework and is based on a review of last year.
c. A vision, mission and values statement is available and visible.
d. The financial plan is linked to the service plan.
e. A map is visible showing the hospital's catchment area and the referral system.
f. A hospital organogram is displayed

3. The community acts as a shareholder in hospital management

Standards:

a. There are community representatives on the hospital board.
b. Information on hospital performance reaches the community by means of an annual report and or through community meetings/ forums.

4. Effective and efficient management systems are in place

Standards:

a. Routine hospital information is collected, analysed and fed back to staff and the community
b. Management decisions cascade down the organisation
c. Communication channels are clear and known
d. Good internal communications are demonstrated
e. Hospital performance is measured and acted upon. (See annexure 1 for a suggested list of indicators.)
f. Patient records are neat, complete and filed correctly.
g. The retrieval rate of patient records is satisfactory.
h. Births, deaths, communicable diseases and cases of all forms of abuse are reported.
i. Financial reports are available on time.
j. Good communication with the clinics and /or referral hospital is demonstrated, including feedback on referrals.

5. Hospital resources are managed for the benefit of patients and the District Health System.

5.1 Human Resources

Standards:

a. Qualifications and professional registrations are verified on appointment
b. Staff are informed about management decisions.
c. Policies on code of conduct, recruitment, grievance and disciplinary procedures available and accessible.
d. Each staff member has a performance agreement and is evaluated accordingly.
e. Each staff member has a development programme.

f. Complete and updated staff records are kept.
g. Staff absenteeism is monitored and acted on.
h. Staff should be skilled and trained to meet patients' needs.

5.2 Financial resources

Standards:

a. Comply with regulations as per Public Finance Management Act (PFMA)
b. Internal audit reports are available and acted on.
c. Revenue generation meets targets set.
d. Expenditure is monitored monthly against budget.
e. Contractors meet specifications.
f. Loss control in place.

5.3 Facility and equipment

Standards:

a. The facility is patient friendly:
    - The buildings and grounds are clean and well maintained.
    - There is access for people with disabilities.
    - There is clear sign-posting.
    - Telephone and / or intercom systems work.
    - Bathrooms and washing areas are clean.
    - There is adequate lighting
    - Patients are free to communicate in the language/s of their choice.
b. The rooms are patient friendly:
    - Patients are able to call the nurses when in need.
c. The facility and equipment is well-maintained
    - There is a maintenance plan for the facility and for equipment.
    - Essential equipment is available and functional (e.g. laryngoscopes)
d. Transport indicators are measured and acted upon.

5.4 Drugs and supplies

Standards

a. There is evidence of proper drug supply management and stock control including levels, rotation, expiry date checking and security.
b. Essential drugs are available.
c. Cold chain and its procedures are in place where relevant
d. Rational prescribing

6. The hospital has policies and procedures to be followed for:

a. Admission
b. Discharge
c. Referral up and down the system
d. Confidentiality
e. Medical records
f. Managing communicable diseases and chronic non-communicable diseases
g. Hygienic food handling
h. Management of clinical waste
i. Drug supply
j. Deaths
k. Contingencies including evacuation plans and fire safety rehearsals
l. Disaster plans
m. Patient care including:
    - treatment protocols

- infection control
- patients with special needs
- safekeeping of patients' possessions
- patients' rights (e.g. privacy)
- accidental exposure to HIV
- occupational health

7. Quality Improvement

Standards – there is:-

a. A quality improvement programme in each unit (e.g. clinical audit; nursing audit, proper nursing records).
b. Adverse clinical incident monitoring, reporting and appropriate follow-up action
c. A peer review system (e.g. reviews of mortality, morbidity and patterns of drug use).
d. Monitoring of patient perceptions.

8. Management encourages teamwork and promotes an enabling environment for staff

a. Management encourages teamwork and a good working environment for staff.
b. There are team meetings at each level of management at least monthly.
c. There are regular staff meetings, at least once a month.
d. Staff are involved in developing budget and organisational processes.
e. Supervision is structured and supportive of staff development.

Chapter prepared by Dr Beth Englebrecht

CORE NORMS AND STANDARDS FOR DISTRICT HOSPITALS

SERVICE DESCRIPTION

Norms and standards common to all parts of the hospital are included in this chapter. This reduces duplication in subsequent chapters on specific clinical programmes. In subsequent chapters norms and standards are those additional to these core norms and standards or are so important that they are repeated later.

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CORE NORMS

1.	The hospital renders comprehensive services 24 hours a day, seven days a week.
2.	Access to emergency care, as measured by the proportion of people transferred from clinic to hospital in less than 1 hour, is improved
3.	The hospital receives visits at least once a month from senior managers and hospital board to support personnel, monitor the quality of service and identify needs and priorities.
4.	The hospital has a mechanism for monitoring services and quality assurance and at least one annual service audit in each discipline.
5.	Patient satisfaction survey is conducted at least once a year.
6.	The hospital has a patient complaints' system in place.
7.	The hospital has a disaster plan in place
8.	The hospital observes universal precautions

CORE STANDARDS

1	**REFERENCES, PRINTS AND EDUCATIONAL MATERIALS**
1.1	Standard treatment guidelines and the essential drug list (EDL) manual for hospitals, The National Department of Health.
1.2	Standard treatment guidelines and essential drug list (EDL) manual: Primary Health Care, The National Department of Health.
1.3	The South African Medicines Formulary
1.4	Access to a well-run library to information that supports evidence-based practice in the form of paper or electronic journals, Cochrane reviews, up-to-date reference books, national and provincial health related circulars, policy documents, protocols and acts that impact on service delivery.
1.5	Copies of the Patients Charter and Batho Pele documents.
1.6	Supplies of appropriate health education materials in local languages.
1.7	Proposed Regulations for Control of Environmental Conditions Constituting a Danger or Nuisance
1.8	Environmental Health and Occupational Hygiene at District Hospitals
1.9	Nursing Act and Regulations
1.10	Access to information about the catchment area, (e.g demographics, disease profile etc)
1.11	Standard operating procedures on drug management
2	**EQUIPMENT AND FACILITIES**
2.1	Basic equipment for examination of patients in the OPD and wards , e.g. blood pressure sets, ENT/ophthalmic diagnostic sets, spatula, swab sticks, stethoscopes, patella hammer, and thermometers
2.2	Adult and child electronic weighing scales, measuring rods and pediameter
2.3	Proctoscope, ophthalmoscope, laryngoscope
2.4	Peak expiratory flow rate meters
2.5	Glucometer and haemoglobin meters.
2.6	Lumbar puncture kits (spinal needles, cannulae, etc).
2.7	Cardiac monitoring unit.

2.8	General X-ray room with supine and erect bucky unit with screening and table mattresses and the following: 2.7.1. Mobile unit 2.7.2. An equipped darkroom, with film processor 2.7.3. X-ray chemicals 2.7.3. Film hopper 2.7.4. Two safe light boxes with filters 2.7.5. Positioning sponge
2.9	Snellen chart
2.10	Veno-puncture sets (needles, cannulae, and tourniquets).
2.11	Fluid giving sets (for blood, crystalloids and colloids) and drip counters.
2.12	A clinical waste storage and disposal system is in place
2.13	Condom dispensers are placed where condoms can be obtained with ease.
2.14	Fixed and/or mobile oxygen supply
2.15	Wards with lockable medicine trolley/cupboard
2.16	A private area for counselling (such as for HIV/AIDS)
2.17	Uninterrupted power supply (UPS) for life support equipment
2.18	All buildings are accessible to the disabled, with an adequate number of toilets for patients and staff in working order.
2.19	Emergency equipment as described in Chapter on Emergency and Trauma
2.20	Available electricity, cold and warm water and telephone.
2.21	Basic equipment to conduct normal deliveries.
2.22	ECG
2.23	An area for on-site screening for HIV, pregnancy confirmation and syphilis
2.24	Computers for information system
3	**MEDICINES AND SUPPLIES**
3.1	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Hospital Level: Paediatrics and Adults, Latest edition, The National Department of Health.
3.2	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Primary Care Level, Latest edition, The National Department of Health.
3.3	Any additional medication required, as prescribed by specialists, to provide follow up care to patients who have been referred from tertiary centres.
3.4	Medicines and supplies always in stock, with a mechanism for obtaining emergency supplies when needed.
3.5	Trolleys with emergency drugs and resuscitation equipment checked daily
3.6	Pharmaceutical and Therapeutic Committee must be in place
4	**COMPETENCE OF HEALTH STAFF**
4.1	All professional staff involved are in professional development activities, which could include, competency assessment and supervision.
4.2	Staff use up and down referral systems to ensure continuity of care for patients
4.3	Staff undertake health surveillance and data collection for simple epidemiological analysis and contribute to the recognition of district health priorities
4.4	Staff undergo regular assessment of performance (audit) to inform training needs and quality improvement
4.5	Staff have in-service training to develop the competencies described in the succeeding chapters.
4.6	Staff have accesses to counselling services for patients who present with trauma such as rape or HIV, and loss such as bereavement
5	**CLINICAL SUPPORT SERVICES**
5.1	**Laboratory**
5.1.1	Chemical pathology:
5.1.1.1	Urine/blood pregnancy testing
5.1.1.2	Bilirubin
5.1.1.3	Liver function test

5.1.1.4	Cardiac enzymes (limited)
5.1.1.5	Urea, creatinine and electrolytes
5.1.1.6	Calcium, phosphate
5.1.1.7	Amylase
5.1.1.8	Lipids
5.1.1.9	Glucose
5.1.1.10	Uric acid
5.1.2	Haematology:
5.1.2.1	Full blood counts
5.1.2.2	ESR
5.1.2.3	Malaria screen
5.1.2.4	Partial thromboplastin time
5.1.2.5	Prothrombin
5.1.2.6	Fibrinogen
5.1.2.7	Preparation and forwarding of bone marrow specimens
5.1.3	Microbiology:
5.1.3.1	Microscopy of CSF, stools and urine
5.1.3.2	AFB microscopy
5.1.3.3	Syphilis screen and quantitative tests including rapid RPR
5.1.3.4	Gram stain
5.1.3.5	Preparation and forwarding of culture specimens
5.1.3.6	Typhoid serology
5.1.3.7	Emergency HIV testing
5.1.4	Group and cross match
5.1.5	Emergency blood transfusion
5.1.6	24 hour access to emergency biochemistry, haematology and microbiology tests
5.1.7	The turnaround time for routine results is less than 48 hours and for emergency results is less than 6 hours.
5.2	**Xray**
5.2.1	Plain film of chest, abdomen, limbs, skull, IVP, barium swallow and barium enema
5.2.2	Contrast media
5.2.3	Lead aprons
5.2.4	Ultrasound
5.2.5	C-arm x-ray unit
5.2.6	24 hour access to emergency radiography
5.3	**Nutrition**
5.3.1	Hygienic food preparation area
5.3.2	Nutrition guidelines followed by relevant staff to ensure that appropriate diets are given to infants, children, malnourished patients and other patients with therapeutic dietary needs
5.4	**Pharmacy**
5.4.1	See chapter on pharmaceutical services.
6	**PATIENT EDUCATION AND SUPPORT**
6.1	Staff are able to approach the health problems of the catchment area hand in hand with the community through the community liaison arrangements such as a hospital board or health committee to identify needs, maintain surveillance of cases, reduce common risk factors and give appropriate education to improve health awareness.
6.2	Culturally and linguistically appropriate patients' educational pamphlets are available on different health issues for free distribution.
6.3	Appropriate educational posters are posted on the wall for information and education of patients.
6.4	Educational videos in those outpatient clinics with audio-visual equipment are on show while patients are waiting for services.
6.5	Patient groups are encouraged and supported
6.6	Access is made available for the spiritual care and support of patients

7	**RECORDS**
7.1	An adequate, uniform patient record system is in place, ensuring continuity in ward care.
7.2	Patient details are recorded using a medically and legally accepted system
7.3	Patient consent and associated counselling is documented
7.4	Discharge summary or referral letter is completed on discharge.
7.5	Discharge summaries are sent to referring doctors and/or written in patient-retained outpatient records
7.6	The hospital utilises the integrated standard district health information system that enables and assists in collecting and using data.
7.7	All information on patients seen and discharged or referred and on deaths is correctly recorded on the registers and kept, in accordance with legal requirements were appropriate
7.8	All notifiable medical conditions, and births and deaths are reported according to protocol.
7.9	All registers and monthly reports are kept up to date.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	There is a well-functioning district hospital board in the hospital catchment area.
8.2	The hospital has links with the district health boards, civic organisations, youth groups, women's groups schools, workplaces, political leaders, traditional leaders and ward councillors in the catchment area.
8.3	The hospital has sensitised, and receives support from, the district health boards.
8.4	The district hospital works in close co-operation with community health centres, clinics, mobile teams and community-based health projects like community health worker programmes or care-groups.
8.5	Where new community programmes are implemented, the hospital board works closely with the district hospital.
8.6	Ensure home-based support for patients living with AIDS or HIV infected mothers who have recently given birth through hospital boards and other community structures to improve nutrition status and care of these patients.
9	**REFERRAL AND OUTREACH**
9.1	A two-way referral system between the hospital and clinics and between the hospital and its regional hospital will be maintained
9.2	Staff provide consultations and management of referrals from clinics.
9.3	Regular feedback on referrals from the clinics is provided with follow up procedures and support written clearly on the referral form or patient held record.
9.4	Transport of an emergency referral will leave the hospital within one hour following request.
9.5	Referrals within and outside the hospital are recorded appropriately in the registers.
9.6	Medical and allied medical staff provide regular outreach visits to offer patient care, supervision and in-service training.
10	**COLLABORATION**
10.1	Hospital staff collaborate with district staff on the planning of PHC services.
10.2	The District Hospital works in close co-operation with community health centres, clinics, mobile teams and community-based health projects like community health worker programmes or care-groups.
10.3	Hospital staff collaborate with social welfare for social assistance and with other health related public sectors as appropriate e.g. SAPS, Defence Force, Private sector.
10.4	Hospital staff collaborate with, religious groups, organised labour and health orientated civic organisations in the catchment area to enhance the promotion of health.

WOMEN'S HEALTH

SERVICE DESCRIPTION

District hospitals provide that part of the comprehensive package of promotive, preventive, curative and rehabilitative reproductive health services for women that requires medical and special resources not found in health centres or clinics. The hospital provides a 24-hour service for acute gynaecological and obstetric problems and deliveries of most high-risk pregnancies. The focus of the outpatient clinic is on taking referrals from clinic staff and referring patients back with information and advice. The hospital provides support and 24 hour advice to local clinics and identifies patients who need higher level of care.

NORMS

1. Reduce avoidable perinatal and maternal mortality year on year
2. Increase the proportion of high risk deliveries occurring in hospital rather than clinics or at home each year
3. Monitor the appropriateness of indications for and fatalities arising from caesarean section anaesthetic and instrumental deliveries
4. Increase patient acceptability of hospital maternal and neonatal services each year
5. Conduct a monthly perinatal mortality, maternal mortality and critical incident review meeting with relevant stakeholders.
6. Notify all maternal deaths
7. Prevent unsafe abortions
8. Increase the use of contraception
9. Reduce morbidity and mortality form cervical cancer
10. Increase the number of births where partners and significant other are involved in childbirth

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

1.1 An appropriate manual on obstetrics and gynaecology, such as Obstetrics in Peripheral Hospitals by J Larsen.
1.2 National or provincial, PEP, breast feeding (IMCI) and neonatal resuscitation guidelines (e.g. APA)
1.3 National or provincial contraception protocols
1.4 National STD and HIV protocols
1.5 National rape protocol
1.6 National or provincial termination of pregnancy protocols
1.7 The latest copy of the Human Genetics Guidelines for Management and Prevention of Genetic Disorders, Birth Defects and Disabilities.
1.8 Sterilisation, Termination of Pregnancy and Domestic Violence Acts
1.9 Provincial circulars and policy guidelines regarding women's health issues
1.10 Guidelines for maternity care in South Africa
1.11 Saving mothers: Policy and management guidelines on common causes of maternal deaths
1.12 National and or provincial guidelines for cervical cancer screening
1.13 National guidelines for contraception

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 First stage room, ambulation area, a and delivery room Fully equipped theatre
2.2 Fixed and/or mobile oxygen supply
2.3 Good light source and a range of specula, including vaginal specula.
2.4 Ultrasound

2.5	Cardiotocograph with paper
2.6	Fixed and/or portable suction apparatus
2.7	Forceps e.g. low forceps wrigles
2.8	Vacuum extractors and cups
2.9	Neonatal resuscitation trolley including Laerdal type) ambubag, and neonatal laryngoscope blades
2.10	Facilities for rooming-in and kangaroo care and for sick neonates
2.11	A waiting mothers area of sufficient size to accommodate mothers from 37 weeks gestation for hospitals serving deep rural areas.
2.12	Beds for post natal mothers with sick babies
2.13	Manual vacuum aspiration equipment
2.14	Equipment to take a PAP smear
2.15	Incubators (minimum of two)
2.16	Equipment for IUCD insertion and removal
2.17	Resuscitation trolley
3	**MEDICINES AND SUPPLIES**
3.1	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Hospital Level: Paediatrics and Adults, Latest editions, The National Department of Health.
3.2	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Primary Care Level, Latest edition, The National Department of Health.
3.3	Any additional medication required, as prescribed by specialists, to provide follow up care to patients who have been referred from tertiary centres.
3.4	Protective gear for accidental exposure to HIV.
4	**COMPETENCE OF HEALTH STAFF**
4.1	Hospital staff are able to take a history and perform a physical examination and tests, interpret and manage patients, clinically and surgically, according to national or provincial protocols and guidelines of comprehensive maternal, neonatal and women's health.
4.2	Staff are able to perform diagnostic radiology including ultrasound to establish period of gestation, to help manage intra-uterine growth restriction and identify twins, placental abnormalities and intra-uterine death.
4.3	Staff provide outreach services and welcome visiting paediatrician and obstetrician /gynaecologist
4.4	Staff are able to carry out the following surgical procedures
4.4.1	Caesarean section for appropriate indications. They are able to deal with:
4.4.1.1	Postpartum haemorrhage and secure haemostasis in difficult situations including the use of uterine artery ligation and sub-total hysterectomy of the uterus as appropriate
4.4.1.2	The repair of tears of the lower segment
4.4.1.3	The dissection of severe adhesions from previous caesarean section
4.4.1.4	Safe techniques of extending lower segment incisions, such as the J-incision
4.4.1.5	Classical caesarean section when appropriate
4.4.1.6	Subtotal hysterectomy or repair of the uterus in treating uterine rupture
4.4.2	Postpartum sterilisation and mini-laparotomy ligation
4.4.3	Termination of pregnancy
4.4.4	D&C, evacuation and manual vacuum aspiration
4.4.5	Pelvic abscess drainage
4.4.6	Laparotomy for ectopic pregnancy and ovarian torsion
4.4.7	Endometrial biopsy
4.4.8	Other procedures
4.4.8.1	Induction of labour
4.4.8.2	The correct use and interpretation of the labour graph
4.4.8.3	The correct use and interpretation of the cardiotochograph
4.4.8.4	Oxytocin augmentation
4.4.8.5	Vaginal delivery after previous caesarean section

4.4.8.6	Breech delivery
4.4.8.7	Vacuum extraction
4.4.8.8	Outlet forceps delivery
4.4.8.9	External cephalic version
4.4.8.10	Acute third degree tear repair
4.4.8.11	Repair of cervical tear
4.4.8.12	Manual removal of placenta
4.5	Staff are able to
4.5.1	manage obstetric emergencies such as eclampsia, multiple pregnancy, cord prolapse, shoulder dystocia, obstructed labour, uterine inversion and aftercoming head of a breech
4.5.2	deliver, resuscitate the newborn and provide standard care including thermal and eye care, infection control using hand spray as well as hand washing in accordance with IMCI guidelines.
4.5.3	offer infant immunisation (BCG and polio) prior to discharge
4.5.4	offer help and advice on breast feeding
4.5.5	deliver and care for low birth weight babies and follow the local referral guidelines which will depend on availability of ventilation services nearby
4.5.6	offer and provide voluntary testing with pre- and post-counselling for HIV
4.5.7	investigate, provide non-invasive management of infertility (history, examination, VDRL and HIV serology, semen analysis and a day - 21 progesterone) and refer for specialist investigations.
4.5.8	offer appropriate counselling, advice and manage gender violence, sexual abuse and rape victims and termination of pregnancy on request.
4.5.9	examine, diagnose and refer breast and cervical cancer
4.6	The outpatient clinic staff are able to:-
4.6.1	Provide routine management, observation and service according to prenatal protocols at each step of pregnancy including at least four visits during pregnancy
4.6.2	Provide education and counselling to each pregnant woman and partner/or significant others on monitoring signs of problems (e.g. bleeding), nutrition, child feeding and weaning, STDs / HIV, delivery, new-born and child care, advanced maternal age, family planning and child spacing, perform the usual routine observations and select and prescribe appropriate family planning methods according to national protocol.
4.6.3	Screen, advice and refer infertility cases as per national guidelines.
4.6.4	Conduct breast and cervical cancer screening as per national protocols.
4.6.5	Recognise, counsel and manage common genetic conditions and refer appropriately
4.6.6	Offer post-natal care as per post post-natal protocols
4.7	Staff organise
4.7.1	Regular monthly perinatal mortality, maternal mortality and critical incident review meetings
4.7.2	Follow up of high-risk babies (e.g. low apgar, low birth weight, congenital abnormality) in the community and early intervention in the event of problems.
5	**CLINICAL SUPPORT SERVICES**
5.1	Laboratory tests for antenatal RPR*, Hb and Rh, urea and electrolytes, liver function tests, full blood count with platelets, INR and partial thrombin time, total serum bilirubin*, HIV* and pregnancy (*rapidly on request).
5.2	X-Ray facilities
6	**PATIENT EDUCATION AND SUPPORT**
6.1	Information is given to mothers on booking for delivery, infant care and breast feeding, education about infant feeding and the introduction of solid food.
6.2	Further information is given to mothers and/or significant others on childbirth and danger signs in pregnancy, signs of labour and making effective transport plans, the value of early and regular antenatal clinic attendance, the importance of breast feeding and adequate child spacing, the use of the well baby clinic and the concept of the immunised child, labour rights as

	applied to pregnant women.
6.3	Women are encouraged to invite labour companions/doulas, who are supported
6.4	Patients are offered group education.
6.5	Avoid conflicting advice is by using standard approaches such as the Baby Friendly Hospital initiative.
6.6	Posters, pamphlets and other educational materials are provided to patients on genetics.
6.7	Counselling is available to parents on genetic disorders, birth defects, disabilities and bereavement.
6.8	Women are encouraged and assisted to plan their pregnancies and are educated about optimal child spacing and sterilisation.
6.9	Women are advised to avoid exposure to teratogens during pregnancy e.g. alcohol, recreational drugs and harmful substances and infecting agents.
6.10	Patients' relatives and the community receive continuous, appropriate high quality information on the importance of antenatal care and delivery in a health care facility.
6.11	Information, education and counselling are offered to adolescents and youth.
6.12	Women are explained their rights about sexual abuse, rape, TOP, prevention of HIV/AIDS transmission and sterilisation.
6.13	Women are advised on the benefits of breast and cervical cancer screening
7	**RECORDS**
7.1	Labour graphs are retained in patient records
7.2	Patient held records e.g. the Road to Health Card are used
7.3	All information on cases and outcome of deliveries are correctly recorded on the register and woman's health card and used to audit the service.
7.4	Genetic disorders and birth defects are notified in the immediate post-natal period.
7.5	All registers and monthly reports are kept up to date including those for perinatal and maternal morbidity and mortality
7.6	Maternal deaths are notified to the Maternal Confidential Enquiry committee.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	The hospital facilitates and supports community action on women's health
8.2	Hospital staff work with clinic staff on identifying and training TBAs and follow up of the training where appropriate.
9	**REFERRAL AND OUTREACH**
9.1	Deliveries are referred back to the referring or, if none, the nearest clinic to provide the routine observations according to the postnatal care protocol.
9.2	All babies delivered at hospital are referred to clinic with a road to health card and clear information on vaccination and postnatal care needs
9.3	Babies being referred are transferred in a way that provides the nutritional and thermal needs of the infant.
10	**COLLABORATION**
10.1	Hospital staff to work with South African Inherited Disorders Association, school teachers, and other NGOs and CBOs to provide information and raise awareness on the care of mother and child, genetic disorders, birth defects and disabilities
10.2	Staff work with local support groups such as the breast feeding, women empowerment and Downs support groups
10.3	Staff work with local support groups to provide information and raise awareness on the prevention of cervical cancer
10.4	Staff collaborate with local support groups in creating awareness on the use of dual protection methods and the prevention of HIV/AIDS

Chapter prepared by Dr Abdul Elgoni with contributions from Dr Jonathan Larsen, Dr George Draper, Ms Zo Mzolo and Dr Elmarie Malek

CHILDHOOD ILLNESS: INFANTS AND CHILDREN.

SERVICE DESCRIPTION

The hospital provides outpatient and in-patient management of nenonate, infant and child health, in accordance with National Standard Treatment Guidelines Primary Care and Hospital Level. This includes preventative, promotive, curative (assessing, classifying and treating) and rehabilitative. As much health care as possible is provided in the home and community and children are admitted and kept in hospital only when this is absolutely essential.

NORMS

1. The environment in the facility is scrupulously clean, the child and family are secure.
2. Road to Health Charts are checked and up-dated at every visit.
3. All children are screened and managed according to IMCI Standard Treatment Guidelines.
4. The hospital OPD has a functional oral rehydration therapy corner.
5. The hospital has accreditation with UNICEF as “Baby–friendly”.
6. Plans are in place to achieve the latest National Goals and Objectives for Child Health.
7. All opportunities for immunisation are utilised
8. The national nutrition policies are implemented
9. A programme of follow-up is in place to ensure quality of life for children with chronic diseases, such that the expected frequency of follow-up hospital visits is clearly set out.
10. All children with notifiable diseases are notified through the correct channels.
11. Regular morbidity and mortality review meetings involving all staff caring for paediatric patients are held, at least 3 monthly, as part of a quality improvement process.

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

1.1 Standard Treatment Guidelines and Essential Drug List: Hospital Level: Paediatrics, Latest edition, The National Department of Health.
1.2 Standard Treatment Guidelines and Essential Drug List: Primary Care Level, Latest edition, The National Department of Health
1.3 A copy of the IMCI Standard Treatment Guidelines: In-patient and out-patient, relevant to the Province.
1.4 EPI (SA): *Vaccinators Manual Immunisation That Works* (latest edition)
1.5 Perinatal Education Programme: Manual 2: Newborn Care. Cape Town (latest edition)
1.6 Relevant International Guidelines, for example WHO Standard Guidelines, American Paediatric Association Guidelines
1.7 Handbook of Paediatrics. Edited by H de V Heese. Oxford University Press (South Africa) – The Red Book from UCT. (Recommended)
1.8 Neonatal protocol and any other appropriate references

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 A hygienic paediatric ward in which each child has his/her own bed/cot
2.2 Accommodation that allows the mother or caregiver to remain comfortably with the child during the hospital stay
2.3 Designated children’s OPD area, away from scenes that may be frightening to the child.
2.4 Kangaroo mother-care beds for the care of uncomplicated LBW babies
2.5 Isolation neonatal wards/divisions
2.6 Oral re-hydration therapy corner set up for immediate re-hydration.

2.7	Procedure room/area for lumber puncture, blood taking, dripping etc.
2.8	Private, quiet room/area for counselling, grieving, family conferences etc.
2.9	Isolation ward or room (for barrier nursing).
2.10	Paediatric resuscitation trolley (in ward and OPD), with:
2.10.1	Small size endotracheal tubes
2.10.2	Small and neonatal laryngoscope blades
2.11	Emergency Care area/ward with:
2.11.1	Pulse oximeter with neonatal and paediatric probes
2.11.2	Cardiac monitor
2.11.3	Oxygen
2.11.4	Masks, Head boxes (large and small) and nasal catheters/ prongs for administering oxygen
2.11.5	Small bore catheter and paediatric fluid giving sets.
2.11.6	Intercostal drain No. 12 (neonatal) and 14 (infant) - insert into emergency
2.11.7	Central venous cannulae and lines
2.11.8	Wall or portable suction
2.11.9	Intravenous solutions for neonates and children
2.11.10	Incubators (at least one in addition to the neonatal unit, available in OPD for babies born outside)
2.12	Infusion pump.
2.13	Baumanometer with different size cuffs, suitable for children (Dinamapp is best).
2.14	Measuring board for length.
2.15	Glucometer sensitive for hypoglycaemia.
2.16	Tape measure.
2.17	Peak-flow meter for children.
2.18	Weight for age, height for age, weight for height tables and scull circumference for age tables.
2.19	Large faced clock, with second hand, for counting respiratory rate.
2.20	Electronic scales or Salter hanging scales. (Not bathroom scales).
2.21	Play and stimulation area for children with toys and educational material.
3	**MEDICINES AND SUPPLIES**
3.1	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Hospital Level: Paediatrics, Latest edition, The National Department of Health.
3.2	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Primary Care Level, Latest edition, The National Department of Health.
3.3	Any additional medication required, as prescribed by specialists, to provide follow up care to patients who have been referred from regional hospital.
3.4	The hospital has litre measures and medicine spoon measures, cups for feeding, sugar and salt (for use in the child that is not dehydrated) and rehydration powder (for use in the dehydrated child).
3.5	Standardised containers for the maintenance of the cold chain
4	**COMPETENCE OF HEALTH STAFF**
The competencies listed in the adult medicine chapter are appropriate plus the following:-	
4.1	Staff have the knowledge, skills and attitudes to enable them to:
4.1.1	Work in a patient-centred way.
4.1.2	Care for children as people, taking into account their special needs.
4.1.3	Assess and manage health problems of children according to the Standard Treatment Guidelines of the Department of Health, at the Primary Care and Hospital Paediatrics level.
4.1.4	Assess and manage children according to the Provincial IMCI In- and Out-patient Guidelines.
4.1.5	Recognise and respond appropriately to symptoms and signs of child abuse.
4.1.6	Develop and run ward programmes that stimulate and facilitate development of the child while in hospital.

4.1.7	Assess and adequately manage pain.
4.1.8	Perform procedures without the use of straight jackets, straps or ties to secure the child.
4.1.9	Use intra-muscular injections only when appropriate.
4.1.10	Facilitate active participation by the parent or caregiver in the care, feeding and comfort of the child.
4.1.11	Assess, advise and help a mother
4.1.11.1	Breast feed exclusively for 4-6 months and continue with breast-feeding, with solids up to 2 years of age, and advise on breastfeeding for an HIV+ mother, according to the national guidelines in infant feeding
4.1.11.2	on appropriate age-group specific feeding practices
4.1.11.3	continuation of breast feeding up to 2 years of age
4.1.11.4	weaning and active feeding.
4.1.12	Treat problems with breastfeeding and re-start a child on the breast/ cup feeding.
4.1.13	Diagnose and manage physical, emotional and sexual abuse in a child.
4.1.14	Assess the developmental level of the child, detect disability and take appropriate action.
4.1.15	Issue the necessary assistive devices to children with permanent disabilities, according to the assessed needs.
4.1.16	Advise and assist families of severely disabled children on the availability of, and how to access welfare assistance and grants.
4.1.17	"Package" an ill child for referral and transport.
4.1.18	Control infection through hand spraying and hand washing.
4.1.19	Monitor and evaluate services and their impact, through service management meetings, including audit of morbidity and mortality of children.
4.1.20	Organise care to ensure continual nursing coverage and doctors coverage afternoon, night and weekend.
4.2	The person on duty has competence to assess and triage patients in a designated place and using specific criteria and guidelines.
4.3	A supervisor undertakes regular assessment of quality of care (including audit), provides support to the staff and also evaluates and ensures community involvement in planning and implementing care.
5	**CLINICAL SUPPORT SERVICES**
5.1	Nutritional Services/Guidelines that diets for children supplied by the hospital are in keeping with age group related recommended feeding practices and feeding of malnourished children, according to IMCI.
5.2	Rehabilitation services including physiotherapy, occupational therapy, speech therapy and dietician.
6	**PATIENT EDUCATION AND SUPPORT**
6.1	Admission to/attendance at the hospital is regarded as an opportunity to promote health through example, education, immunisation, and growth and nutrition monitoring.
6.2	Mothers are made aware of the condition of their child and the treatment plans
6.3	Parents and caregivers are encouraged to remain with their child and accompany and support the child during procedures.
6.4	Children play and learn while in hospital.
6.5	Information on discharge that helps the parent or caregiver to understand the usual progression of the health problem identified and how the child would usually be expected to respond to treatment, and under which circumstances and where further help should be sought.
6.6	The District Hospital has individual counselling and participative group programmes which assist mothers and/or caregivers to:
6.6.1	Breast feed exclusively for 4-6 months and continue with breast-feeding, with solids up to 2 years of age, and advise on breastfeeding for an HIV+ mother, according to the national guidelines in infant feeding
6.6.2	Counsel on more specific age-related recommended feeding practices, according to IMCI.
6.6.3	Assess milestones, growth (according to Road to Health Chart) and development, and

	respond appropriately to deviations from the expected.
7	**RECORDS**
7.1	A child-health card, maternity health record and the Road To Health Card, are used as basic tools for monitoring and record keeping.
7.2	Patient details are recorded, legibly using a medically and legally accepted system.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	Promote and implement key family/household practices to improve child health, as described in the IMCI community component.
8.2	The hospital works in close co-operation with community-based health programmes like community health worker schemes or care-groups.
9	**REFERRAL AND OUTREACH**
9.1	The district hospital refers neonates, infants and children with the following conditions or needs as per protocols:
9.1.1	Genetic/congenital defects and other paediatric conditions that present diagnostic or management problems.
9.1.2	Severe illness, who present diagnostic or management problems.
9.1.3	Prematurity and growth retardation.
9.1.4	Chronic diseases requiring further evaluation and/or management.
9.2	The district hospital accepts and initially manages patients with the following conditions or needs, subject to clinical protocols and referral criteria and procedures in place:
9.2.1	Premature and growth retarded babies: ill or under 2000g, for appropriate management and care.
9.2.2	Neonatal tetanus and other severe neonatal infections.
9.2.3	Meningitis.
9.2.4	Neonatal jaundice and hepatitis.
9.2.5	Genetic/congenital defects and other paediatric conditions that present diagnostic or management problems.
9.2.6	HIV positive infants and children with severe illness, who present diagnostic or management problems.
9.2.7	Children with danger signs, severe disease and/or other referral criteria described in the IMCI Provincial protocol.
9.2.8	Children with infectious and notifiable diseases, who present diagnostic or management problems, including acute rheumatic fever.
9.2.9	Child abuse.
9.2.10	Poisoning.
9.2.11	Burn injuries to the face, hands and perineum, and burns that involve 10% or more of the body.
9.2.12	Trauma: penetrating injuries to the eye, chest and abdomen.
9.2.13	Fractures.
9.2.14	Any child that the clinic sister is unable to manage at the lower level
9.3	Specific follow-up is ensured for children with malnutrition, TB, low birth weight, HIV-positive.
9.4	Referral letters are sent and received for all patients referred to higher levels.
10	**COLLABORATION**
10.1	Department of Education.
10.2	Social workers.
10.3	SAPS Child Protection Unit on child abuse.
10.4	Community-based rehabilitation workers.
10.5	Community Health Workers.
10.6	Home-based care Teams.
10.7	District Medical Officers.
10.8	Clinics and Community Health Centres in the drainage area.
10.9	Regional and Tertiary Level Hospital.

10.10 Community Support Groups.

Chapter prepared by Dr Gary Morris with contributions from Dr Elmarie Malek

TRAUMA AND EMERGENCY

SERVICE DESCRIPTION

The hospital provides

- A 24 hour emergency, resuscitation service, advanced trauma and cardiac life support
- Treatment and observation of medical and surgical and emergencies
- Treatment and reporting of physical and psychological abuse
- Referral of patients to Regional Hospitals and clinics, as appropriate
- Arrangements to deal with disaster situations.

NORMS

1. All district hospitals provide trauma and emergency services.
2. A disaster plan is in place, for dealing with external and internal disasters.
3. Reduce intentional and unintentional injuries among adolescents, including teenage suicide. (National Year 2000 Goals, Objectives and Indicators.)
4. Increase the proportion of emergency health staff who has basic life support training, and who are able to provide emergency care to victims of poisoning, injuries and maternal emergencies. (National Year 2000 Goals, Objectives and Indicators.)
5. All injuries are managed or referred appropriately, and patients are stabilized before tranfer.

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

1.1 An appropriate PHC Training Manual for Trauma
1.2 An appropriate Paediatric handbook.
1.3 Any local protocols as decided by the medical directorate of clinic services/medical superintendent.
1.4 Contact telephone numbers of consultants.
1.5 A current “Handbook of Emergencies”.
1.6 Poisons manual.
1.7 Posters in Casualty displaying CPR procedures, Poison Centre contact numbers, and Glasgow Coma Scale measurement.

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 “Emergency Trolley” (available in casualty):
Containing those items that are needed in an emergency, with a system in place for daily checking, and replenishing after use.

2.2 General:

2.2.1 Sterile instruments for suturing, with adequate replacements or a sterilising system
2.2.3 Pulse oxymeter
2.2.4 Stretchers, with wheeled translucent trauma trolley
2.2.5 Wheeled chair
2.2.6 Thermometer, with subnormal readings
2.2.7 Glucometer
2.2.8 Baumanometer with paediatric, adult and obese cuffs
2.2.9 Stethoscope
2.2.10 Spot lamp
2.2.11 Plaster of Paris
2.2.12 Splints

2.2.13	Hb meter
2.3	**Airway:**
2.3.1	Self-inflating resuscitation bags with oxygen reservoir bag for adults and children
2.3.2	Venturi masks (28%, 40% and 60%)
2.3.3	Portable Ventilator
2.3.4	Portable oxygen
2.3.5	Masks, oropharangeal and nasopharangeal airways: sizes 2 to 8.5
2.3.6	Hudson mask and nebuliser for asthma
2.3.7	Laryngoscope with size 0, 1, 3, 4 blades
2.3.8	Endotracheal tubes from size 2 to 8.5
2.3.9	Introducers (soft and malleable) and Magill forceps
2.3.10	Suction Machine
2.3.11	Tracheostomy pack
2.3.12	Chest drains for adults and children (26 and 16 FG) and underwater drain bottles
2.4	**Bleeding: Equipment for iv infusion:**
2.4.1	Cut-down set.
2.4.2	Pressure infusion bag
2.5	**Cardiac:**
2.5.1	12-lead ECG
2.5.2	Defibrillator with heart monitor
2.5.3	Cardiac board
2.6	**Splinting Material:**
2.6.1	Trauma board and scoop
2.6.2	Splints
2.6.3	Plaster of Paris.
2.6.4	Traction splints and skin traction sets
2.6.5	Spinal boards
2.6.6	Headblocks and sandbags
2.6.7	Hard neck collars.
2.6.8	Crutches
2.7	**Ear, nose and throat:**
2.7.1.	Nasal packing loop forceps
2.7.2	Set for removing foreign body from nose and ears
2.7.3	Diagnostic set: Oroscope and ophthalmoscope
2.8	**Gastro-intestinal, gynaecological and urinary:**
2.8.1	Vaginal Speculum
2.8.2	Suprapubic catherisation set.

3 MEDICINES AND SUPPLIES

3.1 The following drugs should be kept, as part of an “Emergency Trolley”:

3.1.1 **Anaphylaxis:** Adrenaline, hydrocortisone, and antihistamine.

3.1.2 **Convulsions:** Diazepam, Phenytoin.

3.1.3 **Bronchospasm:** Adrenaline, beta-2 agonist solution, hydrocortisone, ipratropium bromide solution, xanthine.

3.1.4 **Analgesia:** Morphine. Pethidine, Aminophyllin. Aspirin tabs. Diclofenac. Paracetamol elixir and tablets. Ketamine.

3.1.5 **Local Anaesthetic:** Lignocaine 1% plain. Ethyl chloride spray.

3.1.6 **Cardiac:** Nitroglycerine sublingual. Nifedipine. Atropine. Streptokinase. Thiamine. Furosamide. Digoxin. Verapamil.

3.1.7 **Wounds and bites:** Tetanus toxoid. Rabies vaccine and immuno-globulin in endemic areas.

3.1.8 **Poison antidotes:** Atropine, charcoal, emetic, methionine, naloxone.

3.1.9 **Eardrops:** Arachis oil, liquid paraffin or similar for killing insects and for wax softening.

3.1.10 **Eye drops:** cycloplegic drops, antibiotics, local anaesthetic, and fluorescein.

3.1.11 **Snakebite:** Polyvalent Snake anti-venom.
3.1.12 **Gynaecology and Obstetrics:** Ergometrine, Oxytocin, beta-2 agonist, $MgSO_4$, Emergency Contraceptives.
3.1.13 **Other:** 50% dextrose, sodium bicarbonate 8.5%, Ringers lactate, sodium chloride 0.9% solutions, a plasma volume expander, fresh dried plasma, blood and blood products.
3.2 Suture material: for skin and sub-cutanous layers
3.3 Gloves and aprons
3.4 Goggles
3.5 Sharps Container
3.6 Body bags/shrouds for dead bodies
3.7 Reliable oxygen supply
3.8 Intravenous cannulae, giving sets (15 and 60 dropper) and blood giving sets
3.9 Needles for intraosseous infusion
3.10 CVP Lines, administration sets and infusion pumps.
3.11 Gastric tubes, small and large bore.
3.12 Urethral catheters for adults and children.
3.13 Urine strips for blood, protein, glucose, ketones and leukocytes.
3.14 Emergency pregnancy test kit (for possible ectopic pregnancy)
3.15 Malaria test kit (in malaria risk areas).
3.16 Occult blood test kit
3.17 HIV rapid test for needle stick injuries

4 COMPETENCE OF HEALTH STAFF

In general staff are able to:

4.1 Deal with any trauma in a safe and effective way.
4.2 Maintain the airway, protect the cervical spine, provide oxygen and control of haemorrhage.
4.3 Perform cardio-pulmonary resuscitation and manage hypothermia.

At least one member of staff on all shifts has:

4.4 Basic life support training, and there is at least one other staff member available to give assistance when required.
4.5 Triage skills, including for children according to IMCI, and rapid assessment of danger signs, with skill to use an associated record-keeping system.
4.6 The ability to identify the nature of injury, and decide on the management needed and its urgency.
4.7 Ability to resuscitate the newborn.
4.8 Skills and attitudes to deal with the emotional trauma of patients and their relatives as well as themselves and their colleagues.
4.9 Skills to use the equipment.

STAFF ARE ABLE TO:

HEAD:

4.10 Assess, decide on the management and/or referral and take appropriate action on the following: level of consciousness, likely severity of a head injury, possible involvement of the cervical spine and other structures in the neck.
4.11 Recognise and deal with the following conditions as appropriate:
4.11.1 closed and open skull fractures including base of skull
4.11.2 trauma to the eye, foreign bodies, prevention of further injury in the case of penetrating injuries, the effects and dangers of blunt trauma, give effective and immediate first aid to chemical burns of the eye.
4.11.3 trauma to the eardrum and foreign bodies in the ear.
4.11.4 epistaxis and trauma to and foreign bodies in the nose.
4.11.5 trauma to the teeth.
4.11.6 an inhaled or swallowed foreign body, including performing Heimlich manoeuvre.
4.11.7 lacerations of the tongue and face.
4.11.8 swallowing problems and a dislocated or fractured jaw.

4.11.9 Major stroke. Minor stroke and transient ischaemic attack (TIA)

CHEST:

4.12 Deal with penetrating injuries of the chest wall, including bullet wounds, by sealing any open wounds and/or by establishing drainage of a pneumothorax, haemopneumothorax or tension pneumothorax.

4.13 Recognise and deal with cardiac tamponade.

4.14 Recognise, anticipate and deal with the effects of blunt trauma to the chest, including contusion, fractured ribs, aortic rupture and internal haemorrhage.

ABDOMEN:

4.15 Institute the immediate management and adequate resuscitation of penetrating injuries of the abdomen, including bullet wounds.

4.16 Recognise, anticipate and deal with the effects of blunt trauma to the abdomen.

4.17 Recognise and deal with gynaecological and pregnancy related causes of an acute abdomen e.g. ectopic pregnancy, ruptured uterus.

4.18 Deal with uterine bleeding.

4.19 Recognise and deal with associated pelvic, perianal, rectal, bladder and urethral injuries.

4.20 Recognise, understand and deal with the special problems of rape and child abuse and know the systems of handling the physical and psychological trauma associated with them.

LIMBS:

4.21 Deal with soft tissue injuries by cleaning, dressing and suturing.

4.22 Recognise and deal with extensive bruising and associated myoglobinuria.

4.23 Identify vascular injuries, recognise urgent loss of perfusion and deal with haemorrhage.

4.24 Recognise, deal with or appropriately refer tendon and nerve injuries.

4.25 Align and immobilise fractures.

4.26 Recognise and deal with common joint dislocations e.g. shoulder, hip, fingers, elbow.

4.27 Recognise and deal with acute abdomen

SPINE:

4.28 Recognise and deal with spinal injuries by preventing further damage with the use of spinal boards and semi-rigid neck collars; and referral when appropriate.

4.29 Recognise and deal with spinal shock.

4.30 Identify and understand the significance of CSF leaks.

SKIN:

4.31 Manage all skin lacerations and wounds.

4.32 Deal effectively with burns, identify those needing further attention including inhalation burns and institute effective first aid for major burns including the use of adequate fluid replacement, analgesia, oxygen supplementation and dressings.

4.33 Recognise and deal appropriately with abrasive and de-gloving injuries.

4.34 Recognise and institute effective immediate first aid for chemical burns.

POISONING:

4.35 Assess the significance of possible poisoning, institute appropriate counter-measures, including the use of emetics and the administration of appropriate antidotes.

4.36 Understand the psychological implications of attempted suicide and ability to render effective immediate care.

4.37 Deal effectively with snakebite.

STAFF ARE ABLE TO PERFORM THE FOLLOWING SURGICAL PROCEDURES:

Head:

4.38 Debridement and closure of open head injuries

4.39 Tracheostomy

4.40 Surgical cricothyroidotomy

4.41 Drainage of abscesses causing airway obstruction e.g. Ludwig's angina

4.42 Maintain airway

Chest:

4.43 Tube drainage of chest
4.44 Pericardiocentesis
4.45 Thoracotomy for stabbed heart

Abdomen

4.46 Diagnostic peritoneal lavage
4.47 Paracentesis
4.48 Ultrasonic diagnosis of intra-abdominal fluid
4.49 Insertion of a suprapubic catheter
4.50 Management of torsion of the testes
4.51 Laparotomy for appendicitis
4.52 Laparotomy for blunt/perforating abdominal trauma with skills to:
- ♦ Pack a bleeding liver
- ♦ Under-run bleeding arteries e.g. mesenteric
- ♦ Repair upper GI and small bowel
- ♦ Splenectomy
- ♦ Repair a bladder
- ♦ Laparotomy for ectopic pregnancy

Limbs

4.53 Conservative management of fractures
4.54 Conservative management of joint dislocations, e.g. hip and shoulder
4.55 Debridement of compound fractures
4.56 Skeletal traction and Steinmann pin insertion
4.57 Faciotomy for compartment syndrome

Skin

4.58 Debridement and suture of all types of skin lacerations

Eyes

4.59 Removal of foreign body from conjunctiva and cornea
4.60 Enucleation

Medico-legal aspects. Staff are able to:

4.61 Identify and deal with patients with emergency medico-legal problems
4.62 Recognise and report abuse
4.63 Write legible, hospital-retained records, detailing the patient's condition and injuries and statement given by patient to ensure adequate completion of police medical reports
4.64 Complete the appropriate medico-legal forms form for all cases of common assault, sexual assault and child abuse.
4.65 Keep a register for abuse cases
4.66 Draw blood for drugs and alcohol
4.67 Collect and preserve forensic evidence.

5 CLINICAL SUPPORT SERVICES

5.1 Ultrasound and X-Ray facilities for taking and processing plain films, as well as simple contrast studies e.g. cystogram and IVP.
5.2 Emergency laboratory facilities to do basic biochemical tests, haemoglobin, pregnancy test.
5.3 Emergency facilities for cross-match and supply of blood and blood products.
5.4 Facilities equipment and competency for giving a general anaesthetic

6 PATIENT EDUCATION

6.1 A mechanism is in place at district level to identify the significant causes of trauma locally.
6.2 The consultations in the outpatient department are used as an opportunity for talking about prevention of injuries and first aid in emergencies, especially burns and poisoning.

7 RECORDS

7.1 Suitable clinical recording forms, including pictorials where appropriate, for trauma, head injury, burns and coma, etc.
7.2 Equipment for keeping records in a disaster situation (felt-tip pen for writing on patient; luggage

	labels; cards, head injury observation charts) is available.
7.3	A reliable patient-held record system is available with a process for retaining copies of records, which may be required for medico-legal purposes.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	Community involved in designing community-based programmes and interventions that will prevent and reduce trauma and injury and equip people to practice basic first aid in the home, school and community.
9	**REFERRAL AND OUTREACH**
9.1	Staff have a clear understanding of:
9.1.1	Indications for transfer and degrees of urgency, as outlined in local policy.
9.1.2	The mechanism of transfer.
9.1.3	The preparation and "packaging" of seriously ill patient for transfer.
9.1.4	The management of seriously ill patient during transfer.
9.1.5	The management of severe injuries until transfer is possible.
9.2	A reliable means of communication is available; both with those responsible for providing emergency transport and with staff able to offer specialist advice when required.
9.3	Transport is available reliably and quickly when needed.
10	**COLLABORATION**
10.1	District Ambulance Service.
10.2	Traffic police and Fire Department.
10.3	Clinics and Community Health Centres in the drainage area.
10.4	District Medical Officers.
10.5	Regional and Tertiary Hospitals used for referral.
10.6	South African Police Services.
10.7	Social Welfare Departments.
10.8	Community-based Rehabilitation.
10.9	Community Health Workers.
10.10	Home-based Care Teams.
10.11	Community Support Groups.
10.12	Private Sector

Chapter prepared by Dr Gary Morris

SURGICAL SERVICES

SERVICE DESCRIPTION

The hospital provides emergency surgery for minor conditions and for serious conditions for which travel to a regional hospital would likely be fatal, and minor and common major elective surgery. This chapter covers non-emergency surgery. Other surgical services are found in the chapters on trauma and emergency services, and reproductive health services.

NORMS

1 Each district hospital has an operating theatre, with an uninterrupted power supply (U.P.S.) back-up, which is functional 100% of the time.
2 All minor elective surgical procedures are performed locally.
3 Waiting times for elective surgery are monitored, with 95% of such procedures performed within 3 months of the need arising.
4 No preventable anaesthetic deaths occur during elective surgery.
5 Regular review of post-operative sepsis rates takes place at least quarterly.
6 Regular morbidity and mortality meetings are held to discuss any untoward events, sub optimal outcomes and deaths at least bi-monthly.

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

1.1 An appropriate handbook on Primary Surgery.
1.2 An appropriate handbook on Orthopaedics and Trauma.
1.3 Appropriate anaesthetic Guidelines for Rural Hospitals
1.4 A good anatomy atlas (e.g. Grant's "Atlas of Human Anatomy").
1.5 Contact numbers of surgeons at regional and tertiary referral hospitals.
1.6 Protocols and guidelines issued by these hospitals.
1.7 A resuscitation checklist detailing the duties of each team member in case of a cardiac arrest, and explicitly naming the team leader (usually the theatre sister or anaesthetist) to avoid confusing orders and counter orders. It should be framed behind glass and fixed to the wall in theatre.

(Many of these are best kept in the operating theatre.)

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 A registered, functioning and properly equipped theatre.
2.2 A standby electricity generator, which is fully operational at all times.
2.3 At least one fully functioning and regularly serviced anaesthetic machine. A service contract for anaesthetic machines and other vital equipment is in place. An on-site artisan is able to perform minor maintenance and running repairs.
2.4 Sufficient surgical instruments to ensure availability for the range of operations performed.
2.5 A CSSD or access to a sterilising service.
2.6 Appropriate sterilized equipment and linen.
2.7 A standby suction machine.
2.8 A diathermy machine.
2.9 A pulse oximeter
2.10 A ventilator to support patients who experience delayed post-anaesthetic recovery
2.11 A high care section for postoperative care.
2.12 A resuscitation trolley, available to serve the recovery room, theatre, corridors, etc., with

defibrillator, ambu bag and all the drugs.

2.13 Life support equipment for the transfer of complex problems, and an emergency transport system that makes such transfers possible.

2.14 A functional tourniquet for bloodless field surgery.

2.15 A range of orthopaedic appliances e.g. crutches, traction, pulleys, etc. (Implants only available in selected centres without ready access to regional hospitals.)

2.16 Instruments and a light source for indirect laryngoscopy.

2.17 Schiotz tonometer.

2.18 Underwater drainage systems.

3 MEDICINES AND SUPPLIES

3.1 Bandages, dressings, eye pads, etc.

3.2 Full range of suture material for the operations performed.

3.3 Anaesthetic gases (oxygen, nitrous oxide, compressed air) through a central supply bank, with emergency oxygen back up, maintenance of the system and a regular, scheduled delivery of gas supplies.

3.4 Theatre sterilisation materials, anaesthetic drugs and specimen bottles.

3.5 Stationery available to ensure recording of operations, anaesthetics, informed consent and critical incidents.

4 COMPETENCE OF HEALTH STAFF

4.1 Medical staff able to diagnose and refer appropriately patients suffering from surgical conditions that cannot be managed at the district hospital.

4.2 Medical staff are familiar with basic principles of surgery, including

4.2.1 Preparation for surgery and anaesthesia, and choice of appropriate anaesthetic

4.2.2 Fluid management before, during and after surgery

4.2.3 Aseptic techniques

4.2.4 Suturing

4.2.5 Closure of wounds

4.2.6 Wound healing

4.2.7 Correct handling of tissues

4.2.8 Post-operative care, including analgesia, activity, diet, etc.

4.2.9 Correct use and care of surgical instruments.

4.3 Medical staff perform a range of surgery, which includes but is not limited to the following procedures:

4.3.1 Minor surgery

4.3.1.1 Biopsy of lumps and other lesions

4.3.1.2 Excision of lumps

4.3.1.3 Circumcision

4.3.1.4 Incision and drainage of abscesses and meibomian cysts

4.3.1.5 Debridement of wounds

4.3.1.6 Secondary closure of wounds

4.3.1.7 Aspiration/injection of knee, ankle, wrist and shoulder

4.3.1.8 Reduction of paraphimosis

4.3.1.9 Suprapubic catheter insertion

4.3.1.10 Cautery/cryotherapy of warts and skin lesions

4.3.1.11 Anal stretch

4.3.1.12 Sclerotherapy for hydrocoeles

4.3.2 Major surgery

4.3.2.1 General surgery

4.3.2.1.1 Debridement

4.3.2.1.2 Appendicectomy

4.3.2.1.3 Laparotomy (selected cases)

4.3.2.1.4 Amputations

4.3.2.1.5 Skin grafts

4.3.2.1.6	Inguinal hernia repair
4.3.2.1.7	Umbilical hernia repair
4.3.2.1.8	Hydrocoelectomy
4.3.2.1.9	Orchidectomy
4.3.2.1.10	Vasectomy
4.3.2.1.11	Enucleation of eye
4.3.2.2	Orthopaedics
4.3.2.2.1	Drainage of acute osteomyelitis
4.3.2.2.2	Clubfoot plasters
4.3.3	general anaesthesia, local anaesthesia (including spinal analgesia) and ketamine anaesthesia. One staff member should have additional expertise in anaesthesia (e.g. a D.A.)
4.4	A professional nurse, with theatre training and/or experience, is available at all times
4.5	A nurse trained as an anaesthetic assistant is available at all times
4.6	All staff involved are familiar with the principles of informed consent and the ethico-legal aspects of surgery and anaesthetics.
4.7	All staff involved in theatre undergo regular emergency drills.
4.8	A trained ophthalmic nurse is available to conduct eye care programmes, and is supported by regular visits of qualified doctors, and support from a district or regional cataract surgery service
4.9	Staff organise
4.9.1	A fair booking system that treats all people equally for elective procedures
4.9.2	A regular clinic for follow-up of surgical patients
4.9.3	Regular team meetings between doctors, nurses, and therapists to monitor pre- and post-operative routines
4.9.4	Regular review of sepsis rates and scheduled monitoring of aseptic techniques in theatre including excessive traffic, and take appropriate action to minimise sepsis.
4.9.5	Regular mortality and morbidity review meetings
5	**CLINICAL SUPPORT SERVICES**
5.1	Ultrasonography
5.2	Dental radiography
6	**PATIENT EDUCATION**
6.1	Education of patients in the care and management of wounds and prevention of infection
6.2	Education of patients regarding their right to informed consent, as well as the purpose, benefit and risk of surgery.
7	**RECORDS**
7.1	Comprehensive hospital-held theatre and surgical records are kept
7.2	Incident recording occurs
7.3	Logs of:
7.3.1	emergency drills
7.3.2	sepsis control
7.3.3	servicing of gas supply and equipment
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	The hospital encourages a support system for discharged patients
8.2	Visits (domiciliary if necessary) for rehabilitation of post-operative patients, particularly orthopaedic patients, are made by physio/occupational therapists or assistants and/or community health nurses.
8.3	There is transport available for such community activities.
8.4	There is a successful system to recover lent equipment (crutches, wheelchairs, splints, etc.)
8.5	Staff give feedback to the community about common surgical problems.
9	**REFERRAL AND OUTREACH**
9.1	Clear guidelines of what procedures can be performed at a local level and which need to be referred are in use.

9.2	Clear lines of communication to consultant surgeons and anaesthetists at referral hospitals exist to obtain assistance with problems that may arise
9.3	Anaesthetic high-risk patients are referred to regional centres, except in emergencies.
9.4	Good refer-back notes to clinics, with instructions for wound care, removal of sutures, activity, etc. are completed.
9.5	Life support equipment is available for the transfer of critically ill patients together with appropriately equipped and staffed ambulances.
10	**COLLABORATION**
10.1	Staff co-operate with lay practitioners, traditional healers, and other complementary health workers to ensure appropriate control of bleeding and infection, cleansing of wounds, incision of abscesses, etc.

Chapter prepared by Dr Ian Couper, with important contributions from Dr Pierre Jaques and also from Drs Richard Garrett and Steve Reid.

ORAL HEALTH

SERVICE DESCRIPTION

The Primary Oral Health Care Package, as a minimum, consists of promotive and primary preventive oral health services (oral health education, tooth brushing programmes, fluoride mouth rinsing programmes, fissure sealant application, topical fluoride application) and basic treatment services [an oral examination, bitewing radiographs, scaling and polishing and simple fillings of 1-3 tooth surfaces (including atraumatic restorative treatment)], and emergency relief of pain and sepsis (including dental extractions).

NORMS

1. At least 50% of primary schools are exposed to organised school preventive programmes
2. Reduce restoration to extraction ratio from 1:12 to 1:8

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

1.1 National Oral Health Policy
1.2 The National Norms, Standards and Practice Guidelines for Primary Oral Health Care
1.3 Oral health education material in the form of posters, pamphlets etc.
1.4 Medical Emergency Flow Chart

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 Dental Unit complete with chair, light, hand piece unit with handpieces, suction and compressor
2.2 Aseptic trolley
2.3 Dental autoclave
2.4 Amalgamator
2.5 Visible curing light
2.6 Dental X-ray unit
2.7 Intraoral X-ray film processor
2.8 X-ray view box
2.9 Lead apron
2.10 Ultrasonic scaler
2.11 Dental operating stool (2)
2.12 Dental hand instruments *
2.13 Endodontic instruments *
2.14 Mobile dental unit in the absence of fixed facilities.
2.15 Medical emergency trolley
2.16 Portal oxygen cylinder

*Refer to "**The National Norms, Standards and Practice guidelines for Primary Oral Health Care**" for details

3 MEDICINES AND SUPPLIES

3.1 All medicines and supplies as **mentioned** in the **document National Norms, Standards and Practice Guidelines for Primary Oral Health Care.**
3.2 Medicines according to the EDL
3.3 Local anaesthetic materials
3.4 Exodontia and oral surgery procedure materials*
3.5 Prophylaxis materials*
3.6 Conservative procedure materials*
3.7 Endodontic procedure materials*

4 COMPETENCE OF HEALTH STAFF

Staff are able to undertake:

4.1 Medical history-taking
4.2 Oral health education
4.3 Treatment of oral infections and other soft tissue conditions
4.4 Surgery cleanliness and infection control
4.5 Chairside assisting
4.6 oral examination and charting
4.7 scaling and polishing
4.8 taking of X-rays
4.9 topical fluoride application
4.10 fissure sealant application
4.11 oral hygiene instructions
4.12 community based oral health services
4.13 emergency relief of pain and sepsis including tooth extraction
4.14 simple fillings (1-3 tooth surfaces)
4.15 oral surgery
4.16 endodontic treatment
4.17 prescription of medication
4.18 Basic communication and counselling skills to deal with patients with HIV/AIDS
4.19 Post-extraction bleeding

5 CLINICAL SUPPORT SERVICES

5.1 See core chapter

6 PATIENT EDUCATION

6.1 All patients attending oral health care clinics should receive oral health education.

7 RECORDS

7.1 Patient Records
7.2 Patient Register
7.3 X-ray Register
7.4 Medicines Register
7.5 Oral health statistics

8 COMMUNITY AND HOME BASED ACTIVITY

School oral health programmes consisting of at least one of the following, in addition to oral health education:

8.1. Oral and dental screenings
8.2. Tooth brushing sessions
8.3. Fluoride mouth rinsing sessions
8.4. Atraumatic Restorative Treatment (ART)
8.5. sFissure sealant application

9 REFERRAL AND OUTREACH

9.1 All patients are referred to the next level of care when their needs fall beyond the scope of competence of a specific category of an oral health professional
9.2 The services will support primary clinic services and act as a referral point.
9.3 There is an outreach mobile service to areas without fixed facilities

10 COLLABORATION

10.1 Collaboration with other departments such as Education and Water Affairs and Forestry for fluoridation of water supplies.

Chapter prepared by Ms Edith Kgabo

ADULT MEDICAL SERVICES

SERVICE DESCRIPTION

The hospital provides outpatient and in-patient management of adults in all life stages, in accordance with National Standard Treatment Guidelines Primary Care and Hospital Level. This includes the provision of acute, chronic, palliative and rehabilitative care. As much health care as possible is provided in the home and community; patients are admitted and kept in hospital only when this is absolutely essential, for physical, mental or social reasons. The district hospital provides the first level of inpatient admissions for hospitalised care. Ongoing management of patients referred to or from secondary and tertiary centres is also provided.

NORMS

1. Doctors review all patients with chronic illnesses, who are taking long-term medication, at least 6 monthly.
2. A programme of follow-up is in place to ensure quality of life for patients with chronic diseases, such that the expected frequency of follow-up hospital visits is clearly set out.
3. All chronically ill patients are managed according to the established national guidelines.
4. Patients with uncomplicated acute illnesses do not stay longer than 7 days in hospital.
5. Hospitalised patients receive their medication on time, on more than 95% of days.
6. All patients with notifiable diseases are notified through the correct channels.
7. Regular morbidity and mortality review meetings involving all staff caring for medical patients are held, at least 3 monthly, as part of a quality improvement process.
8. Iatrogenic occurrences (e.g. bedsores, reactions to blood transfusions, swollen drip sites) are monitored and minimised.

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

1.1 A comprehensive textbook of internal medicine is available, as well as access to the current literature (evidence based medicine).
1.2 South African Family Practice Manual
1.3 An appropriate Handbook of Family Medicine
1.4 All National Protocols for Chronic Diseases are readily available and in use. As of February 2001 – Hypertension, Asthma, Diabetes and AIDS
1.5 All manuals of National TB Control programme and STD Control Programme
1.6 Manuals for outbreak of infectious diseases e.g. cholera

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 Glucometer and Haemoglobin meter
2.2 Functional ophthalmoscope and otoscope in OPD and each ward
2.3 ECG machine
2.4 Peak flow meters and placebo inhalers
2.5 Snellen's charts (literate and illiterate)
2.6 Equipment for pleural tapping and biopsy, pericardiocentesis, and paracentesis and drainage of ascites.
2.7 Intercostal drain sets
2.8 Equipment for skin scrapings and biopsy of dermatological lesions.
2.9 Bone marrow trephine needles and slides
2.10 A short stay area in the OPD for observation of acute patients (e.g. asthmatic attacks) and or resuscitation of patients awaiting transfer to higher levels.

2.11	Beds for stroke patients (ripple mattress or water bed) and adult cot beds
2.12	Isolation ward or room (for barrier nursing).
2.13	Private, quiet area for counselling, family conferences, etc.
3	**MEDICINES AND SUPPLIES**
3.1	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Hospital Level: Adults, Latest edition, The National Department of Health.
3.2	Medicine Supply according to the Standard Treatment Guidelines and Essential Drug List: Primary Care Level, Latest edition, The National Department of Health.
3.3	Any additional medication required, as prescribed by specialists, to provide follow up care to patients who have been referred from regional hospitals.
4	**COMPETENCE OF HEALTH STAFF**
4.1	Staff have the knowledge, skills and attitudes to enable them to:
4.1.1	take a good history, examine and diagnose common medical conditions and initiate and continue treatment, in a patient centred and holistic way
4.1.2	treat patients with dignity, and respect, and ensure the necessary privacy
4.1.3	deal with the needs of particular age groups, especially adolescents and the elderly, as well as with the needs of the disabled
4.1.4	deal with the full range of common conditions presenting in primary care.
4.2	Staff are able to:
4.2.1	make decisions regarding the best place for appropriate management of their patients
4.2.2	identify patients who may potentially need intensive care
4.2.3	notify the appropriate authorities regarding potential public health problems
4.2.4	complete all the required forms for notifiable diseases
4.2.5	carry out and interpret the results of lumbar puncture, venopuncture, liver and pleural biopsies, pericardio- and paracentesis, skin biopsy, basic ultrasound, proctoscopy and ECG.
4.3	Staff have knowledge of local prevalence of diseases and common conditions occurring in the community
4.4	Staff are familiar with national policies and policy guidelines relevant to the care of medical patients.
4.5	Staff ensure that
4.5.1	Medication is given on time to hospitalised patients
4.5.2	Records are kept of all medications given
4.5.3	Screening routinely takes place for common serious and chronic conditions, e.g. hypertension, diabetes mellitus.
4.5.4	The incidence of complications and disability resulting from chronic medical conditions is reduced, through early detection and appropriate management.
4.6	Regular visits by specialists occur for support, ongoing training and patient care.
4.7	Senior clinicians are available to support junior clinical staff at all times.
4.8	Staff are aware of issues around infection control and monitoring takes place
4.9	Staff monitor and evaluate services and their impact, through service management meetings, including audit of morbidity and mortality of patients in medical. An ongoing quality improvement process is in place.
4.10	Care is organised to ensure continual nursing and doctor coverage afternoon, night and weekend. All new and problematic patients are seen at least once a day.
4.11	Care is provided to bedridden patients (e.g. paralysed, AIDS, etc), especially with respect to assistance with feeding and washing, and regular turning to prevent bedsores.
4.12	Terminally ill patients are provided with sufficient analgesia to prevent pain, receive appropriate counselling and are assisted in making decisions regarding their choice of a place to die
4.13	Family members are involved in the care of their relatives whenever possible.
5	**CLINICAL SUPPORT SERVICES**
5.1	The nutritional status of patients is assessed and appropriate therapeutic diet regimens are

	prescribed , especially renal, diabetic and reducing diets, including enteral feeds and the ordering of total parenteral feeds.
5.2	Rehabilitation services (physiotherapy, occupational therapy and speech therapy)
5.3	Social welfare services, through a social worker
6	**PATIENT EDUCATION**
6.1	Families are involved in caring for patients
6.2	Support groups are established, e.g. for diabetic or asthmatic patients, AIDS
7	**RECORDS**
7.1	Patient details are recorded legibly, using the SOAP format.
7.2	Hospital-retained in-patient records include copies of all relevant reports, letters, etc
7.3	Discharge summaries are sent to referring doctors and/or written in patient-retained outpatient records
7.4	Any incidents of iatrogenic causation, such as bedsores, swollen drip sites and reactions to blood transfusions, are thoroughly documented.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	Full co-operation and support is given to home based care, hospice care and other ambulatory programmes.
8.2	Patients with TB are followed up by DOTS supporters
8.3	Staff understand the role of the hospital within the local community
9	**REFERRAL AND OUTREACH**
9.1	Feedback is given to clinics for every referral detailing what was done for the patient and how to continue the management of that patient at clinic level.
9.2	Periodic training of clinic staff takes place at the hospital on clinical guidelines for common problems.
9.3	There is close liaison with regional specialists.
9.4	Close links to the regional referral hospital and referring clinics, with 24-hour telephonic access.
9.5	Referral letters are sent and received for all patients referred to higher levels.
10	**COLLABORATION**
10.1	A close working relationship exists with all the clinics referring to the hospital.
10.2	A team approach is used especially with respect to disability assessment.
10.3	The district management team
10.4	The referral hospital.
10.5	Community health workers in the district.
10.6	Welfare Department social workers and other social welfare structures in the area.
10.7	Home-based care groups and voluntary agencies.
10.8	Emergency Medical Services (EMS) covering the district.

Chapter prepared by Dr Ian Couper and Dr Amara Anozie with contributions from Professor Mohale Molehe, Professor KP Mokhobo, and the Medunsa Department of Family Medicine

MENTAL HEALTH

SERVICE DESCRIPTION

The bulk of mental health care is provided at community and clinic level, as part of an integrated service. This service is supported by district hospitals, which provide care for those with severe psychiatric morbidity, including evaluation and management of attempted suicide, the management of substance withdrawal and delirium, and the admission and initial treatment of patients with psychoses, and referral of medium-term admissions to psychiatric hospitals.

NORMS

1. There is a team approach to mental health problems, involving medical officers, dedicated psychiatric nurses, social workers, and occupational therapists.
2. There is an appropriate area for temporary seclusion of patients in a calm, quiet and human environment to assist the management of uncontrollable behaviour, with adequate monitoring.
3. All patients admitted to the hospital are referred back to local clinics and followed up
4. There is a regular review of all patients in the district who are on psychiatric medication at least 6-monthly.
5. Monitoring by means of key indicators of performance specific to mental health care (quarterly review).

STANDARDS

1 REFERENCES, PRINTS AND EDUCATIONAL MATERIALS

As per clinic level, plus:

1.1 Latest Mental Health Care Act
1.2 Details of names and telephone numbers of consultants at regional hospital and psychiatric referral hospital.
1.3 Details of names and numbers of local support services, crisis centres, South Afrian Police Services, etc
1.4 Primary Psychiatry textbook (e.g. Psychiatry in Primary Care by Allwood and Gagiano, Oxford University Press)
1.5 National Mental Health Training Manual for PHC
1.6 Local/provincial protocols for the management of common mental health problems, including guidelines giving indications and monitoring requirements for sedation and seclusion

2 EQUIPMENT AND SPECIAL FACILITIES

2.1 Protected and secure seclusion area which is under close permanent observation of staff
2.2 An appropriate, comfortable and private room is available for counselling.

3 MEDICINES AND SUPPLIES

3.1

4 COMPETENCE OF HEALTH STAFF

4.1 Staff (doctors, nurses, social workers and therapists) work as a team
4.2 Dedicated psychiatrically trained nurses are available.
4.3 At least nurse with psychiatric training or experience is on duty at all times.
4.4 Staff are able to:
4.4.1 Manage medical and surgical aspects of suicide attempts (e.g. suturing, gastric lavage)
4.4.2 Evaluate a patient after suicide attempt for discharge, referral to social worker, referral to

	community mental health services, or referral to a psychiatric hospital.
4.4.3	Manage substance withdrawal, especially delirium tremens.
4.4.4	Manage delirium and diagnose the cause and refer to a regional or tertiary hospital if necessary.
4.4.5	Certify psychiatric patients as envisaged under the new Mental Health Care Act. (Many of the functions currently fulfilled by the magistrate will now be fulfilled by the hospital superintendent/ clinical manager)
4.4.6	Admit involuntary psychiatric patients for the 72-hour assessment period that is envisaged under the new Mental Health Care Act.
4.4.7	Admit and treat psychiatric patients who:
4.4.7.1	exhibit disruptive behaviour (e.g. restless, but not aggressive).
4.4.7.2	exhibit destructive behaviour (e.g. breaking windows, but not aggressive towards people)
4.4.7.3	are physically aggressive
4.4.7.4	do not give consent for treatment
4.4.7.5	have no behaviour disturbance, but who need to be in a safe and calm environment for a few days
4.4.8	deal with patients referred in from clinics and support the local clinics in fulfilling their mental health function
4.5	Additional functions include:
4.5.1	admission of patients with severe depression and potential suicide risk for observation and initial treatment.
4.5.2	Post-rape counselling (and other post-trauma counselling), with appropriate medical follow-up. Although this is also a clinic level function, most medicolegal work will be done at hospital level, and there is thus a need for a crisis centre and other support.
5	**CLINICAL SUPPORT SERVICES**
5.1	Laboratory tests, e.g. basic blood tests, HIV testing, CSF analysis
5.2	Radiographic services e.g. to exclude trauma
5.3	Access to specialised laboratory services for additional investigations, e.g. monitoring of drug levels, blood alcohol testing, urine cannabis testing, etc.
6	**PATIENT EDUCATION**
6.1	Patients, relatives and the community receive appropriate information on mental health and mental illness.
6.2	Patients and their supporters are given individualised education when their situation is reviewed.
6.3	Patients and their supporters are educated on how to recognise predisposing factors and conditions to prevent relapse.
6.4	Hospital staff use education in the family and community to address ignorance, fear, stigma and prejudice regarding patients with severe psychiatric conditions attending the hospital.
7	**RECORDS**
7.1	All medicolegal records are properly documented and retained by the hospital.
7.2	Patient information regarding ongoing treatment is retained by the patient or family.
7.3	A register of patients is kept and monitored to assess follow-up.
7.4	Regular audit is performed in conjunction with clinics and the district office to assess the number of patients on treatment and when they were last reviewed by the team.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	Staff participate in community awareness programmes for mental health according to the national and international calendar.
8.2	Staff participate in the training of family and carers of patients to play an active role in their rehabilitation, and provide counselling and education to families about mental health issues.
8.3	Staff encourage patient and caregiver support groups in the community.
8.4	Staff keep the addresses and phone numbers of people assisting with mental health and social problems (e.g. women's shelters, community self-help groups).

9	**REFERRAL AND OUTREACH**
9.1	Clearly established path of referral for the purposes of:
9.1.1	Consulting (advice on patient management)
9.1.2	Voluntary admission
9.1.3	Involuntary admission
9.2	Access to properly equipped ambulances with trained paramedics to expedite transfers.
9.3	Clearly established protocol with the local ambulance service provider regarding the requirements for safe transfer of disturbed patients
9.4	All patients admitted to the hospital are referred back to local clinics for follow up on discharge, with feedback to the clinics, continuous support for primary level staff in the management of patients and a mechanism to ensure the patients do not get lost to follow-up.
9.5	Regular support is provided to clinic staff and other community-based health professionals. This support involves supervision, education, review of patient treatment and feedback.
10	**COLLABORATION**
10.1	Staff respect and, where appropriate, seek collaborative association with local traditional healers.
10.2	Staff collaborate with all community services e.g. crisis counselling (Lifeline, other crisis centres pastoral workers), churches and other religious groups, and mental health groups especially those for youth.
10.3	Staff collaborate with the clinics when planning discharges to the community.
10.4	Staff collaborate with SAPS when required.

Chapter prepared by Dr Ian Couper, with assistance from Dr Gunter Winkler

REHABILITATION

SERVICE DESCRIPTION

The role of the district hospital in rehabilitation is to:

- Effectively manage acute and chronic disabling conditions thus preventing disability,
- prepare the disabled person for reintegration into the community through social, psychological and other types of counseling, assistance and training in activities of daily living,
- manage those problems related to disability that cannot be managed in the community
- train patients in activities of daily living
- give support to rehabilitation services in the clinics and community,
- supply and repair appropriate assistive devices and provide access to the orthotic and prosthetic service,
- teach maintenance and servicing of assistive devices to recipients,
- promote occupational health within the hospital,
- assess patients for disability grants, grants in aid and care dependency grants, insurance purposes and third party claims,
- conduct disability awareness programs,
- provide access to social, psychological and spiritual counselling and assistance.

Rehabilitation services are accessed through any member of the health team, but implemented by the rehabilitation therapist or rehabilitation therapy assistant and ward staff under the guidance of the therapist.

NORMS

1	There is a designated room or area for rehabilitation and therapy.
2	Rehabilitation services are delivered in the wards, outpatient department and community.
3	Hospital services are accessible to people with disabilities and beds, bathrooms and toilets are accessible to wheelchair users.
4	Access to the environment, communication, information, assistive devices, trained health professionals, drugs and supplies is assured.
5	People with disabilities are given preference when queuing for services, and where feasible are given appointments to reduce waiting times.
6	People with disabilities are provided with the necessary assistive devices and appropriate accessories, as guided by the Document on Standardisation of Provision of Assistive Devices, February 2000.

STANDARDS

1	**REFERENCES, PRINTS AND EDUCATIONAL MATERIALS**
1.1	National Rehabilitation Policy. December.
1.2	Integrated National Disability Strategy.
1.3	National Occupational Therapy Reference Pack.
1.4	Disabled Village Children by David Werner.
1.5	District Disability Resource Register.
1.6	Standardisation of Provision of Assistive Devices in South Africa.
2	**EQUIPMENT AND SPECIAL FACILITIES**
2.1	**Therapy/Rehabilitation Department:**
2.1.1	Physiotherapy mats.

2.1.2	Splinths.
2.1.3	Bobath balls.
2.1.4	Balance boards.
2.1.5	Mirror.
2.1.6	Parallel bars.
2.1.7	Ultrasound therapy equipment.
2.1.8	Educational toys.
2.1.9	Specific Assessment Tool for occupational-, speech- and physiotherapy.
2.1.10	Pressure garment material.
2.1.11	Splinting material.
2.1.12	Material for making assistive devices for daily living functions.
2.1.13	Goniometers.
2.2	**Out-patient Department**
2.2.1	Screening audiometer.
2.2.2	Developmental screening charts for detecting speech abnormalities.
2.2.3	Screening questionnaire in local vernacular for detecting hearing abnormalities.
2.2.4	Assistive devices and accessories as guided by the Document on Standardization of Provision of Assistive Devices.
2.2.5	Ready-made packs on order per specified patient, as defined in the National Occupational Therapy Reference Pack:
2.2.5.1	Self-catheterisation male and female pack
2.2.5.2	Bowel pack for spinal injury patient
2.2.5.3	Monthly Bowel pack;
2.2.5.4	Monthly self-catheterisation pack,
2.2.5.5	Yearly self-catheterisation pack for patients with spinal cord injury,
2.2.5.6	Colostomy bags and adhesive.

3 MEDICINES AND SUPPLIES

3.1

4 COMPETENCE OF HEALTH STAFF

4.1 Staff attitudes reflect an acceptance of disabled people ands patients with disabilities in the wards. They are cared for with respect and empathy. Family members of acutely disabled inpatients are recognized as full team members of the rehabilitation team.

4.2 All health staff delivering a service to persons with disabilities

4.2.1 understand their role in disability prevention,

4.2.2 work competently as a rehabilitation team in the assessment, treatment and follow up of clients referred for rehabilitation,

4.2.3 strategically plan their service intervention,

4.2.4 understand the relationship between PHC approach and rehabilitation,

4.2.5 implement referral systems and monitor their effectiveness regularly.

Therapy/Rehabilitation Staff

4.3 The three therapy disciplines of Physiotherapy, Occupational therapy and Speech therapy are represented at the district hospital.

4.4 Therapy/Rehabilitation staff is able to:

4.4.1 Plan and implement effective ward and out-patient rehabilitation programmes.

4.4.2 Plan and implement effective hospital based occupational therapy projects e.g. a gardening project for rehabilitation at the hospital, childhood development and stimulation programmes in children's ward

4.4.3 Effectively monitor their service provision through the use of specific indicators developed for the context.

4.4.4 Transfer skills and knowledge to clients, families and other health service providers.

4.4.5 Assess the degree and nature of functional disability and make recommendations to district surgeon for disability grants, grants in aid and care dependency grant applications.

4.4.6	Prepare clients for the use, maintenance and servicing of assistive devices.
4.4.7	Support the supervision and continuing education of mid-level workers.
4.4.8	Liase with all relevant hospital and government departments.
4.4.9	Plan and implement counselling and psychological support programs
4.5	**Nursing staff are able to:**
4.5.1	Assist with the implementation of ward programmes with dependent clients e.g. turning and positioning of patients with spinal cord injury.
4.5.2	Ensure patient compliance with ward programmes.
4.5.3	Implement pain control programmes for burns patients in consultation with doctors and rehabilitation staff.
4.5.4	Maintain the integrity of the skin.
4.5.5	Effectively clean and dry joints affected by increased muscle tone.
4.5.6	Allow clients to be as independent as possible in carrying out activities of daily living.
4.5.7	Identify clients at risk of developing disabilities, pressure sores and contractures.
4.5.8	Educate patients and clients about attitudes towards disability.
4.5.9	Counsel and support people with disabilities and their families.
4.5.10	Manage incontinence problems, if necessary in consultation with doctors and therapists.
4.6	**Doctors are able to:**
4.6.1	Identify clients in need of rehabilitative / therapeutic intervention.
4.6.2	Refer clients in relation to specific rehabilitation referral criteria.
4.6.3	Complete disability grant, grant in aid and care dependency grant applications.
4.6.4	Prescribe and monitor pain control programmes.
4.6.5	Assess continence problems and advise suitable continence management, in consultation with therapist, nurses, patient and family.
4.6.6	Manage spasm related to spinal injury with drug treatment and/or detection and treatment of stress factors.
5	**CLINICAL SUPPORT SERVICES**
5.1	Covered in the general section and elsewhere.
6	**PATIENT EDUCATION**
6.1	All health service providers are practically involved in disability prevention, early identification of disability and education of attitudes towards people with disabilities, and raising awareness of
6.1.1	The importance of prevention of disability through attendance at ante-natal clinics, management of ear infections, prevention of home and traffic accidents, prevention of burns related disability, prevention of back problems by correct lifting procedures, correct posture and activity level.
6.1.2	The importance of immunisation and the normal developmental stages of the child.
6.1.3	Prevention of pressure sores in clients with sensory loss.
6.1.4	Prevention of contractures in clients with limb and / or trunk paralysis.
6.1.5	Availability of assistive devices and their use, maintenance and servicing.
6.2	Education on the client's disability, the cause and the prognosis.
6.3	Education on the availability of social welfare grants for disability.
6.4	Education on how to handle third party claims.
7	**RECORDS**
7.1	All contacts with the client in the hospital and community are recorded on a patient held record.
7.2	All records are available to the clients at all times.
7.3	All hospital records are available to other health service providers at all times, but confidentiality is maintained.
7.4	Information on hospital disability forms part of an integrated district disability information system and is effectively monitored and evaluated periodically.
8	**COMMUNITY AND HOME BASED ACTIVITY**
8.1	Specialist outreach services to support the community therapist and mid-level worker are delivered on a monthly basis as an integral part of the function of the hospital-based therapy/rehabilitation team.

9 REFERRAL AND OUTREACH

9.1 A standardised referral system for rehabilitation is in place and evaluated regularly, within the hospital, and with community services and other sectors.

Internal referral to hospital rehabilitation team:

9.2 Newly diagnosed patients with:
- 9.2.1 CVA
- 9.2.2 burns which involve joints
- 9.2.3 spinal chord injuries,
- 9.2.4 amputations,
- 9.2.5 head injuries,
- 9.2.6 dependent clients,
- 9.2.7 hand injuries and infections,
- 9.2.8 acute inflammatory arthritis,
- 9.2.9 orthopaedic patients,
- 9.2.10 visual and hearing impairment
- 9.2.11 bedsores,
- 9.2.12 continence problems,
- 9.2.13 acute chest infections and severe bronchospasm.

9.3 Children with developmental delay, neurological or learning problems.

9.4 Patients with disabilities that are not on an effective rehabilitation program or have inadequate support in the community.

9.5 Patients in need of assistive devices.

9.6 Patients for functional assessment for disability grant, care dependency grant or grant in aid.

9.7 Musculo-skeletal backache.

9.8 Psychiatric patients not well integrated into their families and community.

From rehabilitation team to clinic or therapy assistant (community), day care centres, protected workshops, self help groups, peer support groups:

9.9 Patients with newly diagnosed disabilities on discharge.

9.10 Severely disabled children who are not accepted at school.

9.11 People with disabilities that could benefit from enrolment in vocational activities.

9.12 Children with visual and hearing impairment to LSEN schools,

From rehabilitation department to other sectors:

9.13 Lawyers for third party claim.

9.14 Social security for social grants.

9.15 Children with disabilities to LSEN schools if indicated by circumstance.

9.16 Disabled adults for vocational training to training centres.

9.17 Employable people with disabilities to Department of Labour.

From occupational health departments to the district hospital

9.18 Rehabilitation of occupational diseases such as ex-mine workers with silicosis and asbestosis.

From the district hospital to specialized secondary or tertiary rehabilitation units for:

9.19 Dynamic splinting.

9.20 Acute spinal chord injury.

9.21 Prosthetics and assistive devices.

9.22 Rehabilitation that cannot be adequately dealt with at district hospital level.

10 COLLABORATION

10.1 Services are delivered in accordance with a district rehabilitation plan, co-ordinated by a district rehabilitation co-ordinator, and co-designed and implemented with disabled clients.

10.2 There is effective collaboration with:
- 10.2.1 all other National and Provincial priority programmes
- 10.2.2 Departments of: Social welfare, Social Security, Home Affairs, Child Welfare, Labour, Agriculture, Taxi Associations, Disabled People Organisations, Non-Governmental Organisations.

Chapter prepared by Gary Morris with assistance from Jacqui Couper, Dana Katz and Karin Volker

Pharmaceutical services

SERVICE DESCRIPTION

The pharmaceutical service supplies and dispenses essential drugs and medical supplies. It selects drugs and medical supplies, purchases these from an identified supplier to maintain adequate quantities, receives, records, stores, issues them to other primary health care facilities and ensures appropriate controls are in place. It dispenses prescribed drugs, encouraging patient compliance and appropriate use.

NORMS

1	All EDL drugs are available at all times
2	Comply with Good Pharmacy Practice as prescribed by the Pharmacy Council
3	Manage drug and medical supplies according to defined Standard Operating Procedures
4	Ensure management information is available from collected data.

STANDARDS

1	**REFERENCES, PRINTS AND EDUCATIONAL MATERIALS**
1.1	National Drug Policy
1.2	National Standard Treatment Guidelines and Essential Drug Lists
1.3	Managing Drug Supply Manual
1.4	Cold Chain manual
1.5	Medical Waste Disposal Policy
1.6	Internationally accepted reference books e.g. Martindale, BP
1.7	South African Medicines Formulary with detailed drug information
1.8	Good Pharmacy Practice Booklet from Pharmacy Council
1.9	Standard operating procedures
2	**EQUIPMENT AND SPECIAL FACILITIES**
2.1	Secure facilities with temperature control
2.2	Secure storeroom for bulk supplies
2.3	Adequate cold storage including thermometer for heat sensitive products
3	**MEDICINES AND SUPPLIES**
3.1	Medicine supplies according to EDL
3.2	Mechanism for obtaining emergency supplies when needed
3.3	Mechanism for obtaining drugs prescribed which are not on the EDL
3.4	Glucose for Glucose Tolerance Tests.

4 COMPETENCE OF STAFF

Hospital work

4.1 Pharmaceutical staff are able to manage the drug supply chain by:

4.1.1 Adequately preparing for the storage of drug supplies

4.1.2 Organising supplies to prevent damage, expiry, duplication and theft

4.1.3 Maintaining stock cards that will keep track of what has been ordered, when, how much and what the re-order levels should be

4.1.4 Appropriately estimating quantities to be ordered taking into account lead times

4.1.5 Arrange transport from the supply point to the PHC facility to ensure that there are no long waiting periods from the time of ordering to the supply of the drugs

4.1.6 Checking what was ordered is received in good condition and amounts as indicated

4.1.7 Maintain the cold chain at all times in the supply chain.

4.2 Staff are able use appropriate dispensing techniques and equipment e.g. measuring cylinder, pill counter, small scale, fridge and thermometer.

District work

4.3 Staff, in co-ordinating drug supplies in the District, are able to:-

4.3.1 Conduct an initial situation analysis of drug supply and distribution in the district

4.3.2 Monitor and evaluate drug supply within the district

4.3.3 Help develop and implement standard procedure for drug management activities in the district, in conjunction with the provincial DOH

4.3.4 Identify the training needs of personnel involved in drug management (e.g. clinic nurses), and arrange to meet those needs.

4.3.5 Develop an efficient and co-ordinated schedule for the delivery and distribution of drugs to all health facilities in the district, in conjunction with the district transport officer.

4.3.6 Be the contact person should queries or problems arise with the supply and distribution of drugs, both within the district and for regional and provincial authorities.

4.3.7 Liase with medical officers and nurse practitioners on the use of the essential drug list (EDL).

4.3.8 Ensure that therapeutic information and the EDL are available to all prescribers in the district.

4.3.9 Prepare and present reports on drug management to the DMT using a set of selected performance indicators.

4.4 Staff are able to follow correct schedule 5,6 & 7 drug procedures

5 PATIENT EDUCATION

Pharmacy staff teach patients about:-

5.1 The importance of compliance with medicines dispensed

5.2 How medicines work

5.3 Proper storage of drugs

5.4 Possible adverse drug reactions

5.5 The disposal of unused or expired medicines

5.6 Rational use issues e.g. sharing of medicines not recommended

5.7 The concept of “Not every ill needs a pill”

6 RECORDS

6.1 Pharmacy staff use

6.1.1 Stock cards for recording drugs and medical supplies

6.1.2 Registers for schedule 5,6 and 7 drugs

6.2 Staff prepare:-

6.2.1 Statistics including drug usage patterns

6.2.2 Monthly reports

7 REFERRAL AND OUTREACH:

7.1 Staff help other health care workers to ensure appropriate management of drugs and medical supplies.

7.2 Staff support referring clinics and hospitals

7.3 Staff contribute to Provincial Pharmacy and Therapeutic Committee (PTC)

REFERENCE AND DOCUMENT SOURCES

Assistive Devices in KwaZulu-Natal, Making the service more accessible. A research project conducted by the Disability Action Research Team (DART), Pam McLaren, Sue Philpott, Richard Hlophe, 1997.
Batho Pele
Clinical care guidelines for adults; - (NDOH) 1999
Cold chain and Immunisation operations manual; - (NDOH) August 1997.
Draft Norms, Standards and Practice Guidelines for Primary Oral Health Care. Department of Health, Pretoria, 1999.
Draft policy guidelines for Vitamin A Supplement, DoH
Ethical guidelines for HIV research (NDOH) 1999
Guidelines for affordable mental health services for people with sever psychiatric conditions in SA
Guidelines for cholera; - (NDOH), October 1998
Guidelines for home care; - (NDOH) 1999
Guidelines for hypertension at primary health care levels; - (NDOH) 1998
Guidelines for medical management of rabies; - NDOH document
Guidelines for the prevention and treatment of otitis media; (NDOH) December 1998
Guidelines for the prophylaxis of malaria, (NDOH) October 1996
Guidelines for the treatment of malaria; - (NDOH) October1996
Guidelines for vector surveillance and vector control; (NDOH) 1996
Integrated National Disability Strategy 1997.
Integrated Nutrition Programme for SA draft document; December 1997
Leprosy control in SA; (NDOH) June 1998
Malaria control policy in SA; - (NDOH) 1995
Management of occupational exposure to HIV (NDOH) 1999
National breast-feeding guidelines for health workers and health facilities, 1998
National Framework and Guidelines for contraceptive services (draft); - NDOH Pretoria 1996.
National guidelines on prevention, early detection/diagnosis and intervention 0f physically abuse of older persons at primary level,
National guidelines on primary prevention and prophylaxis of Rheumatic Fever (RF) and Rheumatic Heart Disease (RHD) for Health Professionals at Primary level
National guidelines on primary prevention of chronic diseases of life style (CDL)
National Occupational Therapy Reference Pack.
National Policy guidelines for victims of sexual offences; - (NDOH) 1998
National programme for control and management of diabetes type 2 at primary level; - (NDOH) 1998
National Rehabilitation Policy. December 1998.
National Year 2000 Goals, Objectives and indicators.
Norms and Standards for psychiatric conditions in SA; - (NDOH) 1998
Overview of malaria control in SA; (NDOH) 1997
Patient's Rights Charter
Policy document MCWH; - National Department of Health, (NDOH) Pretoria, 1995.
Policy guidelines and recommendations for feeding of infants of HIV mothers (NDOH) 1999
Policy guidelines and recommendations for feeding of infants of HIV positive mothers
Policy guidelines for health facility based nutrition interventions to prevent malnutrition in SA, 1998
Policy guidelines on the prevention of conditions leading to Disability
Primary Health Care Manual of the Essential Drugs Programme.
Protocols for management of a person with STD (NDOH) 1999
Rapid HIV test and testing and proposed quality assurance regulations (NDOH) 1999
Standard treatment guidelines for treatment of otitis media at PHC level
Standardization of Provision of Assistive Devices in South Africa, February 2000
Strategies to reduce mother to child transmission (MTCT) of HIV and other infections during pregnancy and child birth (NDOH) 1999

Syndromic case management of STD – a guide for decision makers, health care workers and communicators
Syndromic management of STD (NDOH) 1999
TB and HIV/AIDS clinical guidelines; - (NDOH) 1999
TB: a training manual for health workers; (NDOH) 1998
Technical guidelines on Immunisation in SA;- (NDOH)
The diagnosis and management of STD in Southern Africa
The Essential Drug Lists
The SA medicine formulary
The SA TB control programme, practical guidelines; - (NDOH) 1996
Training manual for health care providers (NDOH), 1999
WHO/UNICEF Guidelines on Integrated Management of Childhood Illness.
Wits University PHC training manual for trauma

ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ART	Atraumatic Restorative Treatment
BCG	Bacillus Calmette Guerin
CBO	Community Based Organisation
COAD	Chronic Obstructive Airway Diseases
CSF	Cerebro Spinal Fluid
D & C	Dilatation and Curettage
DHS	District Health System
ECG	Electro Cardio Graph
EDL	Essential Drug List
EPI	Extended Programme of Immunisation
HIV	Human Immunodeficiency Syndrome
IMCI	Integrated Management of Childhood Illnesses
LBW	Low Birth Weight
NGO	Non Governmental Organisation
PEP	Perinatal Education Progamme
PTC	Pharmaceutical and Therapeutic Committee
RHTC	Road to Health Card
SALGA	South African Local Government Association
SOAP	Subjective Objective Assessment Plan
STD	Sexually Transmitted Diseases
TB	Tuberculosis
TBA	Traditional Birth Attendants
TOP	Termination of Pregnancy
UPS	Uninterrupted Power Supply
UNICEF	United Nations Children's Fund
VDRL	Venereal Diseases Research Laboratory for Syphilis
WHO	World Health Organisation

APPENDIX 1- HOSPITAL PERFORMANCE INDICATORS

There are many indicators of performance and only a few are listed below. Some norms (measurable targets) already exist. For some indicators, information will be easy to obtain but others will need specific processes to be put in place.

Criteria	**Performance measures / indicators**
Are clients satisfied with the service provided?	Client satisfaction rate Community satisfaction Waiting time at OPD or pharmacy
Is the hospital doing the right things? (Being effective) Good diagnosis, treatment and care Objectives and targets are met Regulations and protocols are followed	Incidence of hospitalism (infections obtained in hospital) Perinatal case mortality rate Caesarian section rate Referral rate to higher levels of care Reduction in mortality of children due to diarrhea, measles and acute respiratory infections
Is the hospital cost-effective? (Being efficient) Value for money for • in-patient care • prescribing • use of staff	Cost per Patient Day Equivalent1 In-patient care performance such as bed occupancy rates2, average length of stay, nurse : PDE ratio Absenteeism rate of staff Prescribing patterns and drug supply: Average number of drugs per encounter % of drugs prescribed from the EDL % of scripts which contain drug name, strength, dose and duration
Are the services sustainable? The hospital stay within budget The level of services is sustainable	Spending compared to budget Payments collected from patients as a % of total hospital spending % budget spent on maintenance of buildings and equipment

1 A patient day equivalent is the sum of all inpatient days plus a third of all outpatient visits calculated per day

2 **BOR** = Bed occupancy rate = IPD / nr of days x 100 / number of approved beds

APPENDIX 2 – INDICATIVE LIST OF THE CONTENT OF DISTRICT HOSPITAL PACKAGE PREPARED BY THE NATIONAL PHC TASK TEAM

The primary function of a district hospital is to provide suitable out- and in-patient care in which medical, nursing and other professional care appropriate to the patient's condition, may effectively and efficiently be provided.

According to the World Health Organization's functional definition, district hospitals should generically provide diagnostic, treatment, care, counselling and rehabilitation services. It should cover the following clinical disciplines at generalist level:

Medicine	Surgery	Obstetrics	Paediatrics
Psychiatry	Geriatrics	Rehabilitation	Out-patient services

This list is not considered as fixed, as services should rather depend on the needs of the catchment area being served. The proposed services are according to disciplines or 'domains' and have been built upon those services provided at the community health centre. Furthermore, it supports those services provided at the regional hospital.

SECTION	SERVICES
OUT-PATIENTS DEPARTMENT (OPD)	*Oral Services*:- * Oral Health Education * Implement preventive programme * Basic sepsis control including tooth extraction * Placement of simple fillings *Basic Ophthalmic Services:-* * Prevention of blindness * Promotion of eye care *Basic Curative Services including:-* * Diagnosis * Treatment * Referral *Referred Medical and Surgery Patients* *Referred Psychiatric Cases* *Referred Social Work Services* *Referred Rehabilitation Services*
CASUALTY	24 hour accident and emergency services Minor operations in casualty
THEATRE/ANAESTHETIC	60 - 80% minor operations, i.e. operations taking ± 30 minutes, and 10-30% major operations, i.e. more than 60 minutes.
RADIOGRAPHY	* Chest * Abdomen * Limbs * Skull * Barium meal (swallow) * Hysterosalpingogram
LABORATORY	Antenatal RPR, HB and RH testing Coombs test Serum pregnancy test Microscopic urine testing Biological markers for occupational related diseases *Following standard tests:-* * Biochemistry * Haematology * Lung function * Microbiology
MEDICINE	Treatment to include at least the following: * Arthritis * Asthma * Cardiac failure * Depression * Diabetes * HIV/AIDS * Hypertension * Infectious diseases * Overdose * Sexually transmitted diseases * Tuberculosis (pulmonary and extra-pulmonary) * Palliative care * Obesity * Poisoning * Basic eye care * Foot care (podiatrics) * Services for conditions of older persons, e.g. osteoporosis, elderly abuse * Trauma

SECTION	SERVICES
OBSTETRICS	***** External cephalic version * Antenatal ultrasound * Vacuum extraction * Forceps delivery * Oxytocin augmentation * Caesarean section * Removal of retained placenta * Emergency blood transfusion facilities * Planned delivery of baby 1.5 kg - 2.5 kg * Planned breech delivery * Vaginal delivery after previous Caesarean section * Intrapartum cardiotography * Emergency hysterectomy secondary to uterine rupture
PAEDIATRICS	* HIV/AIDS ***** Asthma * Child Abuse * Gastroenteritis * Malnutrition * Meningitis * Neonatal jaundice * Pneumonia * Premature babies > 1200g * Rheumatic fever * Fever * Anaemia * Infectious diseases * Congenital/genetic conditions
PSYCHIATRY	***** Depression * Para- or threatened suicide * Acute psychosis * Acute anxiety or panic attacks * Post-traumatic stress
SURGERY	* Cardiothoracic management of pneumo/haemothorax *ENT* * Quinsy * Tonsillectomies and Adenoidectomies * Tracheostomies *NEUROSURGERY* * Scalp suturing * Indentification of injuries, concussion & intracranial pathology *EYE* * Removal of cataracts * Enucleations * Meibomian cysts and abscesses * Eye injuries *ORTHOPAEDICS* * Fractures and dislocations needing plaster-of-Paris * Traction (skin & skeletal) * Tendon repair * Amputations * Aspirations/injections of joints * Plantar wart excision/cauterisation *PLASTICS* * Practical care of extensive wounds * Debridement * Medium-sized burns and skin grafts

SECTION	SERVICES
	GENERAL * Umbilical hernia repair * Appendicectomy * Incision and drainage of abscesses *TRAUMA* * Major/multiple trauma triage * Advanced resuscitation skills *UROLOGY* * Circumcision * Vasectomy * Hydrocelectomy * Inguinal hernia repair * Suprapubic catheterisation *VASCULAR* * Conservative management of varicose ulcers * Deep vein thrombosis * Deep venous incompetence
GYNAECOLOGY	* Postpartum/laparoscopic sterilisation * Temination of pregnancy * D&C/evacuation/manual vacuum aspiration * Pelvic abcess drainage * Laparotomy for ectopic pregnancy or ovarian torsion * Vulvar biopsy/minor surgery * Endometrial biopsy * Cervical polypectomy * Colposcopy * Breast biopsy * Hysterectomy * Repair of 3rd degree tear * Postmenopausal care
OCCUPATIONAL HEALTH	* Diagnosis and treatment of occupational-related diseases * Occupational hygiene * Information and referral services
REHABILITATION SERVICES	* Provision of basic assistive devices * Rehabilitation
PREVENTIVE SERVICES	* Health Education

RANGE OF PERSONNEL REQUIRED AT THE DISTRICT HOSPITAL TO PROVIDE THESE SERVICES

This list illustrates the range of personnel that would be required at a district hospital. It is, however, acknowledged that to perform the requested intervention at the required standard, existing personnel could require a certain amount of training.

DISCIPLINE	PERSONNEL		
Medical and Dental	*generalists (one with occupational health training) *visiting specialists		
Nursing practitioners	*general professional nurses *primary health care clinicians *theatre nurses *enrolled nurses *hospital infection control nurses	* advanced midwifes * psychiatric nurses * paediatric nurse * nursing auxillaries * occupational health nurse	
Pharmacy	*pharmacist (who may act as district pharmacist) *pharmacist assistant		
Support personnel	*drivers *gardeners *food services	*security *maintenance *messengers	*cleaners *porters *translators

	*linen/laundry services	
Therapists	*occupational therapist *speech and hearing therapist * dietician *dental therapist	*physiotherapist *rehabilitation assistants *oral hygienist *dental assistants
Laboratory	* laboratory technician/technologist	
Other services	*social workers *environmental health officer	*radiographers *optometrists