

THE SOUTH AFRICAN SOCIETY OF OCCUPATIONAL MEDICINE



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of Occupational Medicine

FOUNDED IN 1948

DESIGN, EQUIPMENT AND STAFFING OF OCCUPATIONAL MEDICAL CENTRES AND OCCUPATIONAL HEALTH MOBILE UNITS





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GUIDELINE DOCUMENT

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TABLE OF CONTENTS

1.	INTRODUCTION	4
2.	SITUATION OF THE CLINIC, MEDICAL CENTRE OR MOBILE CLINIC	4
3.	CLINIC DESIGN	4
4.	WAITING AND RECEPTION AREA	4
5.	SISTER'S OFFICE	4
6.	EXAMINATION ROOM	5
7.	TREATMENT ROOM	5
8.	DISPENSARY	5
9.	STORAGE (Room may be made in the sister's office for this purpose.)	5
10.	TEA AREA	5
11.	TOILET FACILITIES	5
12.	SPECIAL INVESTIGATION ROOM(S)	6
13.	MOBILE CLINICS	6
14.	STAFFING	6
15.	RECOMMENDED CLINIC EQUIPMENT AND STOCK	7
16.	POSSIBLE DESIGNS	8
17.	BIBLIOGRAPHY	9

1. INTRODUCTION

- 1.1. Well-designed and properly structured clinics, medical centres or mobile clinics are essential in industry today.
- 1.2. The objective is to provide recommendations of the type of facilities that are necessary to ensure that medical care is administered with dignity and professionalism.
- 1.3. In order to issue medicines, the clinic must be registered, and have a permit that is obtainable from the Department of Health.

2. SITUATION OF THE CLINIC, MEDICAL CENTRE OR MOBILE CLINIC

- 2.1. It should be easily accessible to all workers, including workers with disabilities.
- 2.2. It should be easily accessible to ambulances or motor vehicles.
- 2.3. It should be well signposted.

3. CLINIC DESIGN

- 3.1. The size and sophistication of the facility will depend on the services that are, or should be provided according to the nature of the business and number of workers in the business.
- 3.2. Room sizes and floor plans will depend on requirements and the space available.
- 3.3. The distance from suitable referral facilities may influence the extent of services and facilities that are provided.
- 3.4. Any clinic should be clean, quiet, well illuminated, ventilated and private. It should be painted in light, pleasing colours with tiled walls around washbasins. Floors must be of an impervious substance and easily cleaned. The clinic must be well maintained.
- 3.5. Passages and doors must be wide enough to allow stretchers and wheelchairs, and there should be an approach ramp if necessary.
- 3.6. For security reasons, workers should enter and leave the clinic through one entrance.

4. WAITING AND RECEPTION AREA

- 4.1. A bell is useful to call for attention or announcement.
- 4.2. The area should be separate from the offices and examination rooms to ensure privacy and confidentiality of telephone conversations and patient consultation or counselling.
- 4.3. Notice boards and shelves to display pamphlets and health-educational material are useful.
- 4.4. A clerk or receptionist may be seated in this area if the workload warrants such an appointment.

5. SISTER'S OFFICE

- 5.1. The sister's office could also be used by the visiting Medical Officer. It should be situated near the reception area from where the clinic function can be easily supervised.

- 5.2. Furniture and fittings should include a telephone, lockable record and stationery cupboards, a desk, chairs, and, in certain instances, a computer with accessories.

6. EXAMINATION ROOM

- 6.1. This could be part of the sister's office.
- 6.2. Ideally this area should be divided into two or three private cubicles each containing an examination couch and stool, chair, pedestal cupboard or medicine trolley for equipment and clothes' hooks.
- 6.3. This design will eliminate many bottlenecks, and will allow one cubicle to be used as a restroom or observation room when required.

7. TREATMENT ROOM

- 7.1. Although it is ideal to have a separate room, this may can be part of the sister's office.
- 7.2. This could be a busy area, and should be as spacious as possible. Dressings and many daily procedures could be done in this room, including eye testing and spirometry.
- 7.3. Furnishings and fittings should include a kitchen unit type sink and cupboards, hot and cold water, table and chair for hand dressings, examination couch and stool, dressing trays, steriliser, angle-poise lamp, etc.

8. DISPENSARY

- 8.1. A secure lock-up room with cupboards and shelves for safe storage of bulk supplies and daily medication is specified as a requirement for clinic registration by the Department of Health.
- 8.2. However, it may also only be a lockable cupboard in the sister's office.
- 8.3. A small fridge for vaccines, certain medicines, ice packs, etc is necessary.

9. STORAGE (Room may be made in the sister's office for this purpose.)

- 9.1. A storage room or area is useful for old records, X-rays, cleaning equipment, crutches, etc.
- 9.2. This may also form part of the sister's office.

10. TEA AREA

- 10.1. For this purpose a separate small area with an electric socket for a kettle and refrigerator, plus a sink, cupboard and drainage board could be provided.
- 10.2. A small table in the sister's office with a kettle and a few containers for coffee, tea, sugar, etc. could also sere as a tearoom.

11. TOILET FACILITIES

- 11.1. One toilet for the clinic staff, and at least one for workers with washbasins, soap and paper towels and facilities for sample collection should be available.

12. SPECIAL INVESTIGATION ROOM(S)

- 12.1. If special investigations such as audiometry and lung-function testing are routine procedures in a plant, separate areas for these investigations are recommended.

13. MOBILE CLINICS

- 13.1. Mobile clinics should be staffed and equipped according to the services to be rendered.

14. STAFFING

- 14.1. Staffing of an occupational health unit depends on the requirements of the company with respect to the following:

- 14.1.1 The risks identified according to the occupational risk profile of each category of worker.
- 14.1.2 Legal requirements.
- 14.1.3 The nature of the services provided.
- 14.1.4 The general health needs of the employees.
- 14.1.5 The company culture of social responsibility.
- 14.1.6 The availability of an Occupational Health Team, consisting of a Safety Officer, Occupational Hygienist, Safety Representatives, Trainers, Medical and Nursing Practitioners, etc.
- 14.1.7 The workforce size and numbers exposed to occupational health risks, age groups, etc.
- 14.1.8 The availability of an employee-assistance programme.
- 14.1.9 The availability of medical-aid fund for the employees or whether primary health-care will be provided.
- 14.1.10 The availability of logistical services.

14.2. Recommendations

- 14.2.1 ILO - for preventative services only:
One hour per month of a physician's time and two hours of a nurse's time for every 15 to 30 workers.
(Reference: Encyclopaedia of Occupational Health and Safety, undated, International Labour Office).
- 14.2.2 Prof AM Coetzee:
One hour per week of doctor's time and one hour per day of nurse's time for every 50 workers.
(Reference: Coetzee, AM 1995 Managing the health of people at work. Lex Patria, Doornfontein).
- 14.2.3 SASOM:
One hour per week of a doctor's time and one hour per day of a nurse's time for every 120 employees.
(Reference SASOM Guideline 11: Guideline for Occupational Health Audit)
- 14.2.4 City of Tshwane
A difference in staffing needs is made between high- and low-intensity occupational health services. High intensity includes Initial Health Evaluation, Medical Surveillance and Exit Health Evaluation. Low intensity excludes them. It includes very limited primary health care services.
High intensity: One hour per week of a doctor's time and one hour per day of a nurse's time for every 100 workers.

Low intensity: One hour per week of a doctor's time and one hour per day of a nurse's time for 400 workers.

(Reference: Verbal communication, Deputy Director: Occupational Health and Safety Operations Management, October 2010)

14.2.5 Prof DJ Kocks: Doctoral thesis 1994

A variety of ratios are used in industry. A few examples are:

- 1 ONP for the first 250 - 500 workers. Then 1 additional ONP for every 500 workers.
- 28 ONP hours for every 10 000 worker hours per week (\pm 1 ONP per 1785 workers, 8 hours per day 5 days per week).
- 20 ONP hours for 1 OMP hour.
- 9 - 10 primary health care consultations by a registered nurse for 1 by a medical doctor.

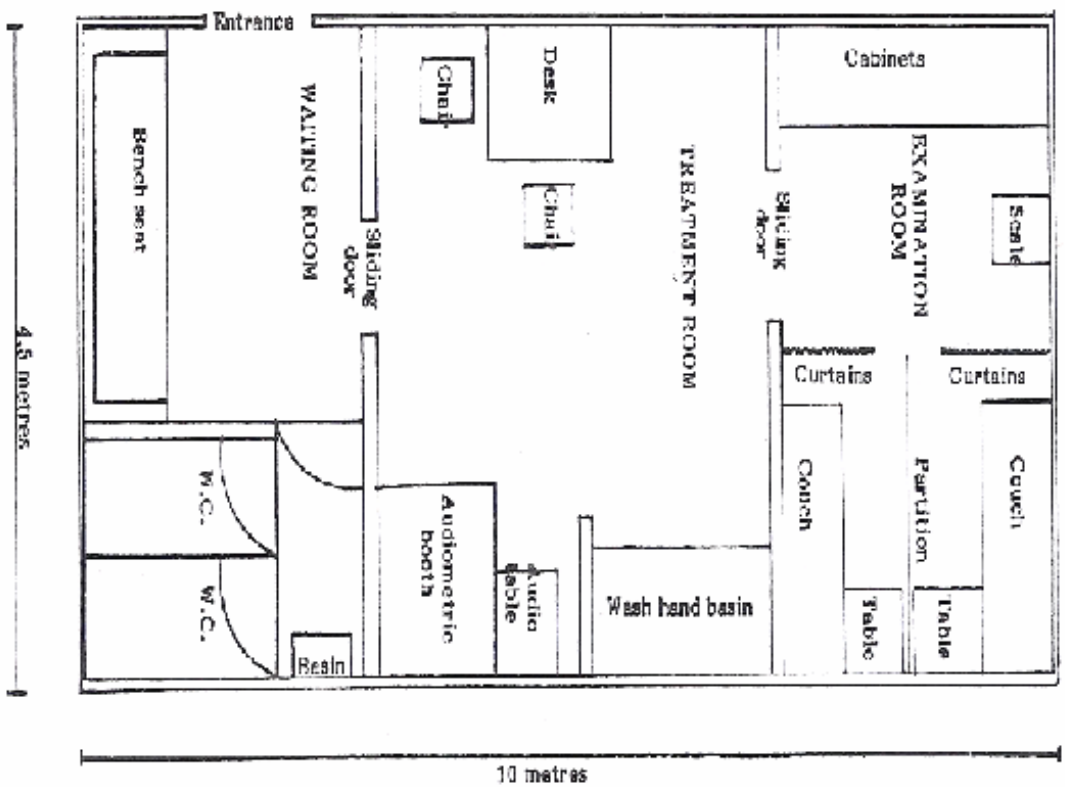
15. RECOMMENDED CLINIC EQUIPMENT AND STOCK

Examine	POP	Cleaning
Examination coach and one-step	Orthopaedic wool	Broom
Linen and plastic cover for coach	Crepe bandage 50, 100 mm	Mop
Pillow, pillow cases and plastic cover	Triangular bandage	Bucket
Linen savers	Crutches	Duster
Small covering blankets	Bucket for water	Dustbin
Blanket	POP Scissors	Cloths to clean and dust
Patient shorts	POP rolls, dressings	Cupboard
Patient gowns	POP remover or cutter	Washbasin
BP machine	POP opener	Drinking glass
Strong light or lamp		Toilet workers and staff
ENT set and ear pieces	Dressing	Hand towels (paper)
Stethoscope	Cleaning pack	Soap
Reflex hammer	Gauze or cotton wool extra	Air freshener
Thermometer	Saline	
Spatulas	Ointment	Medicine
Nasal speculum	Scissors	Cupboard with lock
Scale	Bandages	Medicine register(s)
Measuring tape	Plasters	Medicine as needed
Height measure	Bowl(s)	Syringes: 2, 5, 20 ml
KY jelly		Needles: blue and green
Sanitary pads	Drip	Sharps bin
Cusco speculum	Vaculiter: Saline and ringers	Webcol swabs and spirits
Masks	Administration sets	
Shelves	Jelco: pink	Tests
Drawers	Plaster	Spirometer
Instrument trolley		Peak-flow meter
Eye wash bottle	Stationery	Snellen card
Ear syringe	Pens	Eye-test machine
Dustbin: medical waste	Writing pads	Audiometer
Gloves	Files	Glucometer and test strips
Masks	Forms	Urine dipsticks
Goggles and visor	Desks	Urine glasses
Apron (plastic)	Cabinet	

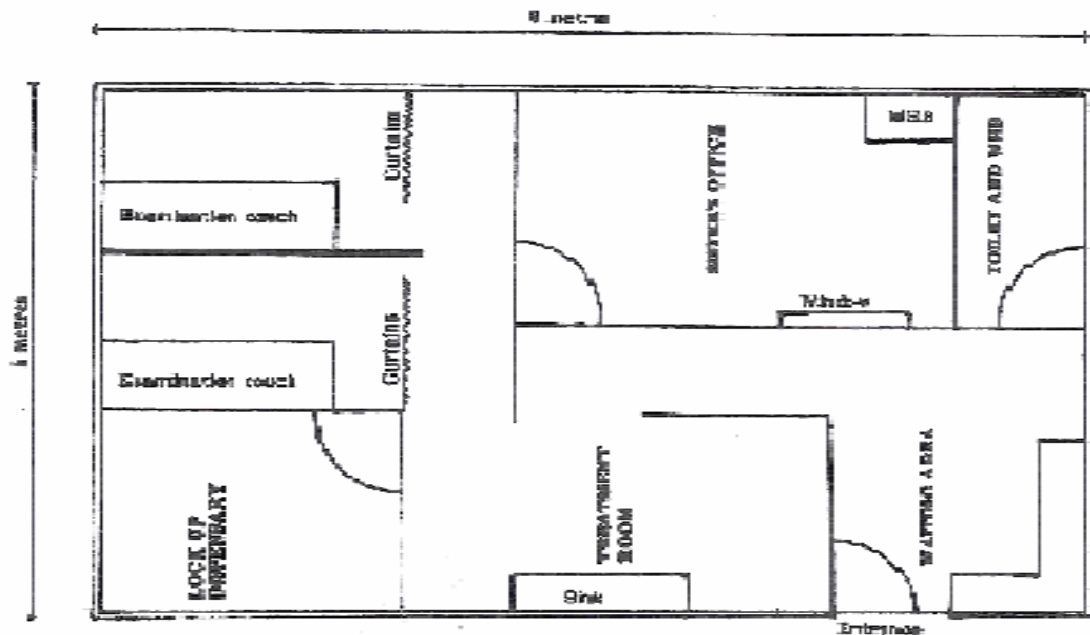
	Chairs	Suture
Oxygen	Paper clips	Needle holder
Cylinder	Stapler	Forceps: toothed
Gauge	Stapler remover	Forceps: non-toothed
Tubes and fittings	Ruler	Mosquito or artery
Masks	Scissors	Dental syringe
	Diary	Dental ampoules plain
Emergency	Calendar	Suturing material
Ambubag	Computer and accessories	Scalpel handle
Mouth piece no 2, 3, 4	Telephone	Scalpel blades
Cervical collars		Kidney dish
Splints	First aid	Cleaning pack
Spinal board	Legal requirement	Steriliser heat or cidex
Suction	Operational requirement	

16. POSSIBLE DESIGNS

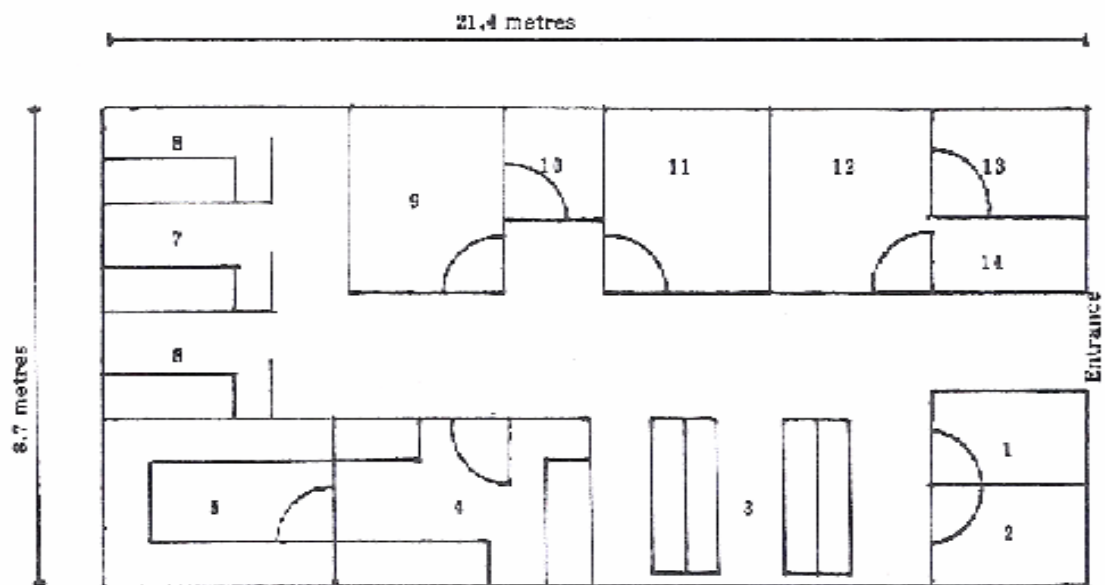
SMALL MEDICAL CENTRE (45 METRES²)



SMALL MEDICAL CENTRE (40 METRES²)



LARGER MEDICAL CENTRE (187 METRES²)



- | | | | |
|-------|--|----|--------------------------------------|
| 1 & 2 | Parent's toilets 1 200 x 1 600 each | 9 | Special investigations 2 750 x 3 250 |
| 3 | Waiting room 3 000 x 1 850 | 10 | Staff toilet 1 800 x 1 200 |
| 4 | Treatment room 4 800 x 2 750 | 11 | Sister's office 2 750 x 3 250 |
| 5 | Drug store 1 000 x 2 750 | 12 | Clerk and Records 2 750 x 3 750 |
| 6-8 | Examination couches 3 000 x 1 700 each | 13 | Linen stores 2 300 x 1 350 |
| | | 14 | Toilet area 2 300 x 1 200 |

17. BIBLIOGRAPHY

17.1. SASOM Guideline, Newsletter 16, December 1987.