



SETTING UP A SEXUALLY TRANSMITTED DISEASES CLINIC

Dr. O.P. Arya,  
The University Department of Genito-Urinary Medicine  
Royal Liverpool Hospital, United Kingdom



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INTRODUCTION

Sexually transmitted diseases (STD) continue to occur at unacceptably high levels throughout the world. The advent and spread of human immunodeficiency virus (HIV) infection, which may be facilitated by a number of STD call for more vigorous attempts at STD control.

The three major strategies for the control of STD are : i) health education and health promotion, including the promotion of condom use; ii) appropriate management of people with STD; and iii) early detection and treatment of asymptomatic disease.

The first and foremost requirement for STD control is to ensure delivery of effective clinical services for diagnosis and treatment. The clinical services for STD vary widely in different parts of the world as regards distribution, quality, utilization and effectiveness:

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- (a) they may be non-existent, with the result that patients indulge in self-treatment or seek treatment from non-medical personnel or other untrained personnel. The consequences include: inadequate and inappropriate treatment, development of antimicrobial resistance, further spread of infection, and complications;
- (b) they may be combined with dermatology, usually in the capital city or major hospitals and often overcrowded with long delays in waiting to be examined;
- (c) they may be ill-equipped and inadequately staffed by inexperienced people and without laboratory support;
- (d) they may be highly sophisticated, well equipped, staffed by specialists, integrating various aspects of good patient management including diagnosis, treatment, contact tracing, health promotion, and providing reliable data. This last type (d), highly developed STD service, is mainly to be found in some industrialised countries, and in only a few teaching national reference hospitals of developing countries.

This document offers general guidance on developing STD clinical services: This can be done either by setting up an STD Clinic, or as part of the Primary Health Care, catering for a large majority of patients in some developing countries.

#### 1. FUNCTIONS OF AN STD CLINIC

All of the primary functions of an STD Clinic pertain to all STD clinical services, whether they are provided in an integrated peripheral facility of the primary health care system or in a special clinic.

##### A. Primary

- (a) to detect or exclude STD including HIV infection;
- (b) to give prompt and appropriate treatment;
- (c) to advise on treatment compliance and follow-up procedures;
- (d) to manage treatment failures;
- (e) to ensure that the patient's partner(s) are evaluated and treated;
- (f) to counsel on disease prevention;
- (g) to identify other health problems and, if necessary, to refer to other health services;
- (h) to retain the patient's case notes;
- (i) to compile clinical activity and STD reporting data to evaluate clinical services and permit disease surveillance and trend analysis.

All of the above are to be provided to both sexes under conditions of privacy and confidentiality.

B. Secondary

- (a) to use the facilities, if suitable, for training of medical and paramedical personnel.
- (b) to carry out research - e.g. into aspects of planning, implementation and evaluation of various approaches to STD and HIV infection control (WHO/VDT/89.448)

2. COMPONENTS OF STD CLINICAL SERVICES

2.1 Staff

- (a) Clinician. The term clinician used in this document relates to any person actually diagnosing and treating patients. This may be a physician with several years' formal training, or a medical auxiliary with little or no knowledge and experience in STD management. The clinician is the most important component for implementing the STD (and non STD) patient management protocols, as well as other tasks. This person must have a proper aptitude to work in STD control, and should receive appropriate training in the management of STD.

The clinician is also the starting point of the health information system.

- (b) Other supporting staff:
  - (i) Nurse(s) to assist the clinician during examination of the patient and taking specimens, and for administering treatment;
  - (ii) Health adviser(s) for contact tracing, health education and counselling;
  - (iii) Clerk(s) for receiving and registering patients, maintaining records, and preparing statistics;
  - (iv) Secretary to type all correspondence, arrange meetings, type minutes, etc.;
  - (v) Laboratory workers to perform the laboratory testing, as feasible at the level of health care where the management takes place.

It can generally be assumed that all of the functions of an STD clinic (see 1) cannot be accomplished effectively by the clinician alone. The number of supporting staff will vary from zero to several depending upon the level of health care delivery, the size of the population served, and the number of patients. However, many of the PHC centres will already have some or all of the categories of paramedical staff comprising medical assistant, health educator, health adviser(s), health assistant(s), nurse(s), midwives, laboratory assistant(s), clerk(s), secretary and field workers etc. The use of these existing staff is implied in the concept of integrated STD clinical services.

All of the staff working in STD clinics must have the ability and temperament to relate to the wide variety of patients in a sensitive and respectful manner.

## 2.2 Support services:

- (i) Laboratory facilities The availability of laboratory facilities (including microbiology and serology) improves considerably patient management, provides a sound basis for speedy contact tracing and other control measures, and leads to more accurate statistics, and hence more meaningful assessment of incidence and trends.

In the absence of laboratory facilities the management of the patient should follow the syndrome-based approach (ref WHO/VDI/85.437; Technical Report Series, 1991, in press).

- (ii) Administration A person must be made responsible for planning, directing and organizing activities; administering and procuring resources, including drugs and other supplies; and evaluating the outcome of STD control activities. This person may be the STD programme manager or another public health programme manager at central or more peripheral level.
- (iii) Supervision and referral Where STD management is carried out by non-specialists, an appropriate supportive structure for supervision and referral will be needed.

## 2.3 Other aspects

### 2.3.1 Premises, physical appearance:

The premises should be as bright, clean and cheerful as possible.

### 2.3.2 Acceptability

The clinical service should be socially and culturally acceptable to important target groups such as women and adolescents.

Any potential changes in the existing resources (e.g. rearrangement of accommodation and/or staff duties) as a result of integration of STD and HIV infection control services should be handled with care so as to ensure acceptability by those involved.

### 2.3.3 Location

The STD service should be integrated into the PHC or located in the general outpatient department of the main government district hospital. The laboratory facilities, including microscopy, culture and other tests, should be easily accessible to allow rapid transfer of specimens and results.

### 2.3.4 Signposting

The style of signposting of the STD clinic should be decided at the local level.

#### 2.3.5 Hours of service

The clinic opening times should reflect consideration for those who are in full employment. The patients must be seen on the same day or on the next occasion the clinic is open to prevent the spread of infection and development of complications.

#### 2.3.6 Appointment system

An appointment system allows the patient to be seen around the time of his/her choice. The disadvantages are that it requires a larger staff, may discourage spontaneous, but needed, visits, and relies upon more sophisticated records and communication systems.

#### 2.3.7 Management to pre-empt default

Whenever possible, diagnosis, treatment and education services should be organized to occur at the same visit. Many patients, especially in developing countries, are unable or unwilling to attend more than once, when that is not absolutely necessary.

#### 2.3.8 Tests for HIV infection

As a general rule HIV tests are carried out only if adequate and appropriate counselling support and adequate protection of confidentiality are available.

#### 2.3.9 Cervical cytology smears and colposcopy

Because genital warts (human papilloma virus (HPV) infection) are frequently encountered in STD clinics in industrialised countries, and because of the belief that certain HPV types have a role in the etiology of squamous anogenital cancer, cervical cytological screening and colposcopy are increasingly being offered by STD services. It should be mentioned, however, that important issues about the relationship between HPV infection and carcinoma of the cervix remain unresolved.

Before embarking on the cervical cytological screening, the cervical cytology policy should be discussed with the cytologist who will be responsible for reporting results, as well as with the gynaecologist who will provide back-up services for abnormal smears. Local counselling and recall facilities must also be adequate. All this may add prohibitively to the cost and for the foreseeable future, large scale cervical cytological screening and colposcopy will likely remain restricted to much larger centres.

### 3. RELATIONSHIP TO THE LEVEL OF HEALTH CARE DELIVERY

The STD clinical services are usually provided at a peripheral clinic, a health centre, a hospital, private surgery, a pharmacy or any other facility where the patient may be able to see a clinician in privacy.

Broadly speaking, four levels of health care delivery may be distinguished (WHO 1986, and Table 1). Inherent in these is considerable variation in the quality of service e.g. with staff, who may be a general duty medical auxiliary having little or no training and non-existent laboratory facilities at one end compared with fully trained staff and comprehensive laboratory facilities at the other. The latter might for instance be in a national central or reference hospital. The PHC level may lie somewhere in between. Thus, the STD clinical services may be provided from:

- (a) integrated public health services, for instance a combination of STD services with PHC facilities comprising general outpatient clinic, family planning clinic, antenatal clinic/immunization clinic; and/or from
- (b) a dedicated categorical STD clinic, which is usually hospital based.

Nevertheless, for each level, there is a need to develop a simple cost effective strategy for delivering clinical services.

### 3.1 National/Central Facility

For STD control programmes to be implemented through the PHC system, it is essential that the country has a national STD centre with a categorical or dedicated STD clinic comprising diagnostic and treatment facilities of high standard; where clinicians, epidemiologists, microbiologists, public health workers and health promotion experts can collaborate and plan appropriate control measures; provide training for all categories of staff, act as a reference centre, conduct operational research activities and epidemiological surveillance, and evaluate control programmes.

### 3.2 Categorical STD clinics

These self-contained STD clinics are very effective, but need considerable space (Figure 1), and possibly more equipment and support staff, and hence are likely to be more expensive than integrated services. It sometimes is possible to identify unused building/premises which might be suitable after renovation to create an STD clinic. In some developed countries district general hospitals have categorical STD clinics. It should be mentioned that the catchment population for categorical STD clinics in the developing world may be small compared to the total population in need of services. This would lead to an unfavourable cost-benefit ratio if these clinics would concentrate exclusively on curative care.

## 4. ORGANIZATION OF THE CLINIC

### 4.1 Workload

Most patients attend without appointment. Therefore, the workload may fluctuate widely (see Appendix 1 for workflow).

### 4.2 Time for each patient

The time required to examine, treat and counsel a patient depends upon the sex of the patient, and upon whether the visit is for a new or old problem. Generally, females and new patients need the most time.

#### 4.3 The patient management process

In most locations male and female patients can be seen at the same session. However, depending upon cultural factors, the main clinic reception area and the reception counter may be either shared or separate.

Patients should not have to wait too long and every staff member must work to obtain this goal.

The patient is registered in privacy; the details taken include patient's name, age, sex, address, place of birth, marital status and occupation.

The patient is then given a numbered registration card and asked to wait. The file is given to the clinician and the patient called and directed to the consulting room where the history is taken. The patient is then examined, either, in the same room which has a screened examination area where the patient can undress, or, in the adjacent examination room. Depending upon laboratory services appropriate specimens are taken. The specimens for microscopy are examined immediately in the laboratory/microscopy area. The clinician checks the results, and then gives treatment and follow-up advice. Treatment may be administered in an examination room or in a separate treatment room. If microscopy is not available diagnosis and treatment will have to be based on the syndrome-based approach and on an epidemiological basis.

After completing the case notes, the clinician either may refer the patient to a health adviser or health assistant for partner notification and/or further counselling, or carry out these tasks himself.

While the patient is waiting for microscopy results, the clinician could interview and examine the next patient in a second examination room, if available.

#### 4.4 Clinic lay-out

If local culture discourages mixing of sexes, but it is decided that male and female patients should be seen at the same sessions, a categorical STD clinic should ensure separate flow for each gender from waiting area through consultation, examination and treatment (e.g. see Figure 1). The staff must be able to move freely throughout the premises.

##### 4.4.1 Size of the clinic

The size of the clinic including the number of rooms, will largely depend upon patient volume. Other determinants include the average consultation time and the number and duration of clinic sessions per week.

Figures 1 and 2 are examples to illustrate spaces required for specific functions. Layout and number of rooms can be modified to suit local circumstances and it is understood that multiple functions may need to be carried out in one room. When planning a new clinic building, one should allow for future expansion of the clinic.

## 5. INTEGRATION OF STD SERVICES AT THE PHC LEVEL

Although the establishment of a network of full-time specialized STD clinics may be desirable, for instance in the large District General Hospitals in big cities with considerable STD problems, this will be unrealistic in many areas. Moreover, such clinics, being largely urban, will be accessible to no more than 20% of the population in developing countries. Therefore, high priority should be given to the integration of STD services within the existing PHC delivery system. The functions and components of services and the strategies outlined above basically remain the same; only the scale of provision may differ. Many of the centres undertaking PHC will already have some of the facilities mentioned above. Integration of STD services in this situation requires initiative to make the best and most innovative use of the existing resources.

### 5.1. Preparatory steps

Essential primary steps will include making a case of need for STD services, obtaining approval of the Ministry of Health, involving the PHC team at an early stage and consulting with the District Council, local relevant voluntary organization and/or other leadership to thus ensure community goodwill and participation.

#### 5.1.1 Designing and implementing STD services

The integrated STD services may begin on a part-time or full-time basis depending on the availability of premises, staff and flexibility. The STD service should be creatively adapted to existing resources. It may be possible to secure re-assignment of space through understanding and co-operation. Compromises may have to be made, while at the same time achieving the objectives of management process and workflow (see Appendix 1).

The minimum requirements are: (i) a clinician, and (ii) consultation/examination room(s). The patient's examination can be completed in the combined consultation/examination room. The same room and examination table can easily be made ready for women by the addition of adjustable stirrups.

Laboratory priorities at the peripheral levels are: (a) microscopy of (i) wet mount to diagnose trichomoniasis, bacterial vaginosis and occasionally candidiasis, and (ii) stained smears of urethral, endocervical or conjunctival specimens to detect gonococcal or non-gonococcal infection; (b) serological tests for syphilis (RPR or VDRL test) and possibly HIV infection.

Essential equipment and supplies are a properly maintained and functioning microscope, a worktop, a heat source to fix slides, as well as a few laboratory reagents, 10% potassium hydroxide, pH indicator strips, and a sink. These are likely to be already available in many PHC centres, and indeed could be accommodated within the consulting/examination room.

The treatment may be administered in the same examination room or in another vacant room. Procedures such as skin biopsy, cauterization and cryosurgical treatment (if available) of warts may also be carried out in the same consulting/examination room.

If the clinic is being run by a medical auxiliary or a non-specialist, difficult cases can be referred to the resident doctor or visiting doctor or specialist who may also bring a darkfield microscope for genital ulcer specimens until this service becomes available at the local centre on a permanent basis.

If and when the workload has increased significantly and persistently, then a case of need should be made for new and additional resources.

#### 6. MEDICAL AUDIT/QUALITY CONTROL

- (i) Medical auxiliaries, especially those lacking STD training, should be monitored at work in their use of patient management protocols.
- (ii) The work of laboratory assistants can be monitored by reviewing interpretation of stained smears and by comparing the results of urethral smears from men with the corresponding cultures.
- (iii) It may be possible to review patient records at random from various centres, as regards clinical details and treatment, and discuss constructively any deficiencies in management with a view to improvement. This may be done once a month at a team meeting without divulging the name of the responsible clinician, or from which facility the case sheets came.
- (iv) There should also be a mechanism to obtain the patients' views as to whether the service is user friendly as regards the quality of reception, waiting time, etc. Those who wish to complain should be able to do so.

#### 7. IN-SERVICE TRAINING

To keep the staff interested and up to date in good clinical practice, refresher courses may be arranged periodically either at the PHC centre itself or at a central hospital.

#### 8. SUMMARY AND CONCLUSIONS

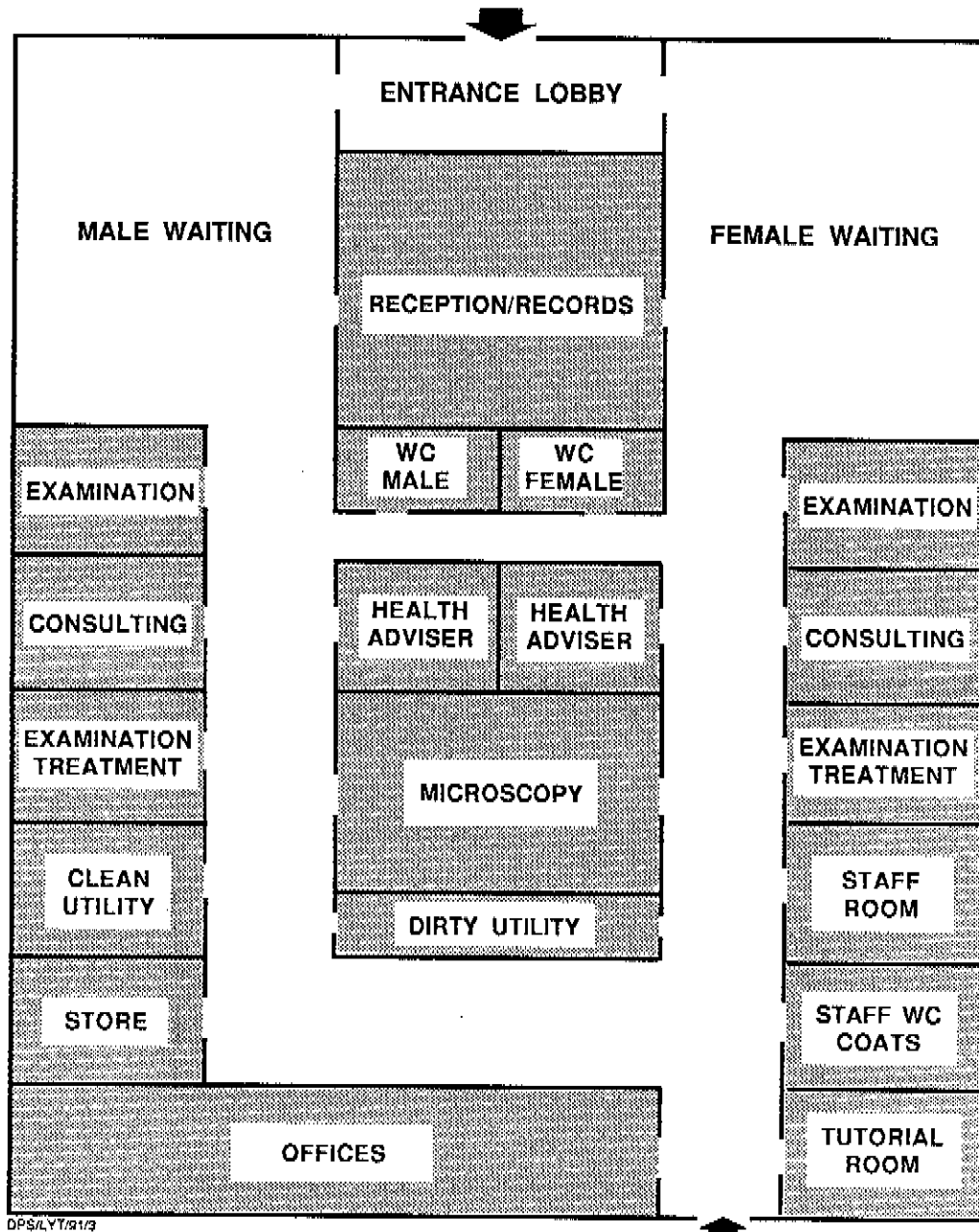
STD remain a major health problem throughout the world. Their role in facilitating the transmission and spread of HIV infection necessitates vigorous and innovative control approaches. The situation is considerably worse in the developing countries, mainly because of lack of resources. The most important focus for STD control are the STD clinical services. The network of full-time specialized STD clinics, which are the mainstay of STD control in some industrialized countries, is not a realistic goal for developing countries. A practical and cost-effective alternative is to integrate STD services into the PHC programme.

However, while the best use must be made of the existing resources, that in itself may not be adequate. There remains an urgent need for new resources and a strengthened health infrastructure if STD clinical services are to achieve a significant degree of success in the control of STD, including HIV infection.

Table 1. ORGANIZATION OF STD/HIV CLINICAL SERVICES  
IN FOUR LEVELS OF HEALTH CARE DELIVERY

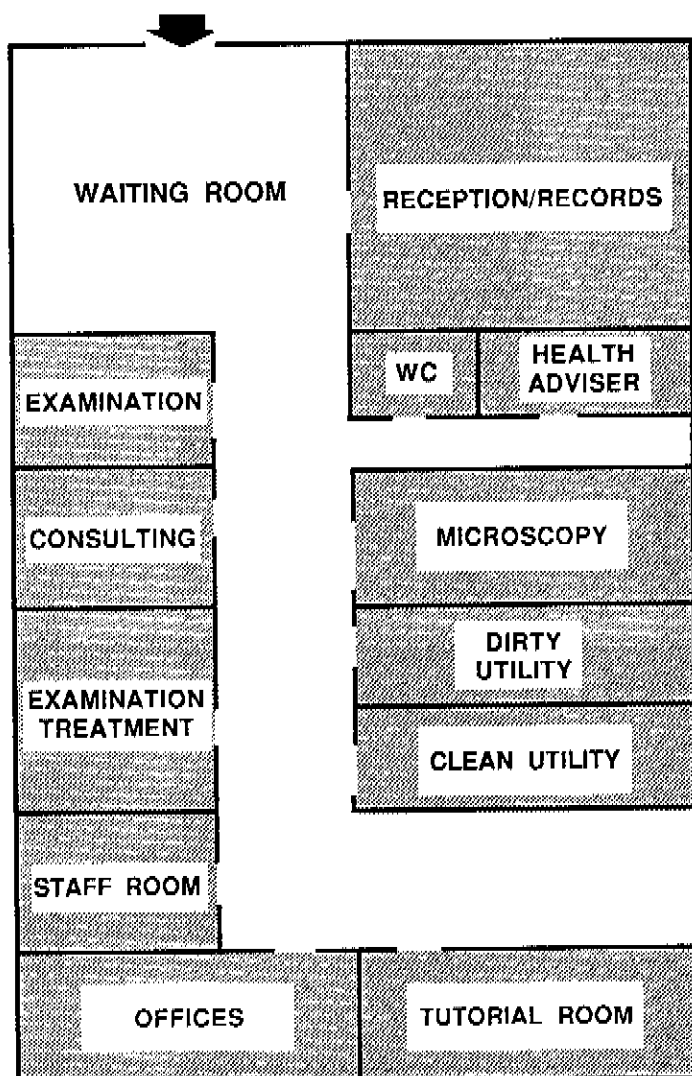
TRAINING LEVEL OF MEDICAL ATTENDANT	LABORATORY SERVICES	CLINICAL FACILITY
I. None	None	Village Aid Post/ Dispensary; PHC Centre
II. Some training	Light microscopy; <u>Also possible:</u> darkfield microscopy, RPR card test for syphilis, HIV antibody test, cervical cytological smear (Peripheral level laboratory).	PHC Centre; Some District Hospitals
III. Fully trained	All services in (II) <u>plus</u> cultures for <u>N. gonorrhoeae</u> and perhaps other sexually transmissible organisms; VDRL, TPHA or AMHA-TP <u>Also possible:</u> Antigen detection tests for Chlamydia (e.g. ELISA or direct FA) (Intermediate level laboratory)	Some District and Regional Hospitals, Some Urban Health Centres
IV. Fully trained	More extensive laboratory services including antimicrobial susceptibility testing (Central level laboratory)	Central Hospital Reference Hospital Teaching Hospital

Figure 1. PROTOTYPE OF AN STD CLINIC  
TO ACCOMODATE SEPARATE MALE AND FEMALE PATIENT FLOW\*



\* (The layout and the number of rooms may be modified; see text)

Figure 2. PROTOTYPE OF AN STD CLINIC  
WITH A SINGLE SUITE OF  
CONSULTING/EXAMINATION ROOMS\*



OPS/LY7/91/4

\* (The layout and the number of rooms may be modified; see text)

APPENDIX 1 : WORKFLOW IN AN STD CLINIC <sup>1</sup>

Patient presents at Reception

|

Patient registered at Registration Desk

|

Patient waits in Waiting Area

|

Patient called and directed to  
Consulting Room,  
History taken by clinician

|

Patient undresses, examined by clinician  
and specimens taken,  
Patient dresses

|

Patient waits in Waiting Area for  
microscopy and/or rapid antibody or  
antigen test results

|

Patient recalled to Consulting Room for  
results and treatment if necessary

|

Patient receives treatment and  
counselling, and advice regarding  
follow-up including partner notification

|

Patient leaves clinic

Patient given outpatient card  
with his/her Registration Number;  
patient's record taken to  
clinician

Test results inserted in  
patient's record

Patient's record taken to health  
adviser (if one is available) for  
partner notification and further  
counselling; if health adviser not  
available, clinician to  
carry out these tasks

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<sup>1</sup> Adapted from: DHSS Special Treatment Clinic, a design guide, DS 224/74

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