

# Australasian Health Facility Guidelines

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## Part B - Health Facility Briefing and Planning 0080 - General Requirements

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#### **Australasian Health Facility Guidelines**

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## Index

|  |    |
|--|----|
| 00 GENERAL REQUIREMENTS                          | 4  |
| 00.01 General                                    | 4  |
| 00.02 Service Planning                           | 4  |
| 00.03 Role Delineation of Health Facilities      | 4  |
| 00.04 Capital Development Guidelines             | 5  |
| 00.05 Cost Planning Guidelines                   | 6  |
| 00.06 Cost and Area Benchmarks                   | 6  |
| 00.07 Recurrent Costs                            | 6  |
| 00.08 Environmentally Sustainable Design         | 7  |
| 00.09 Natural Disaster                           | 8  |
| 00.10 Occupational Health and Safety             | 10 |
| 00.11 Accessibility                              | 12 |
| 00.12 Infection Control                          | 13 |
| 00.13 Culture and Health as an Element of Design | 14 |
| 00.14 Engineering Services / Standards           | 18 |
| 00.15 Information Technology / Communications    | 19 |
| 00.16 Standards & Codes                          | 20 |
| 00.17 Furniture, Fittings and Equipment (FF&E)   | 20 |
| 00.18 Fixtures, Fittings & Equipment             | 20 |
| 00.19 Operational Policies                       | 20 |

## 00 GENERAL REQUIREMENTS

### 00.01 General

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This section sets out the parameters required to guide the planning of Health Care Facilities.

It covers the service, policy and operational issues to be considered for all projects. It then looks at basic principles for good design that will result in appropriately planned facilities, fit for purpose and adaptable in the future.

The target audience for this part ranges from clinicians and managers with little or no capital project experience, through novice designers to experienced planners, managers and clinicians.

For experienced project teams, this section may be used as a reference point or checklist against which to compare or assess project design solutions.

### 00.02 Service Planning

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These Guidelines are a resource to assist in the planning, design and construction of Health Care Facilities. The information provided places the capital planning process within a framework that depends on prior and thorough service planning.

A clearly defined Services Plan, Models of Care, outline of community requirements and Operational Policies must be developed and approved in accordance with appropriate delegations before embarking on the capital planning process.

These Guidelines require that all parties involved in the Facility Planning Process have responsibility for ensuring that Health Care Facilities are planned and designed in a way that minimises asset management and maintenance costs, maximises efficiencies, and provides a safe work environment.

Sharing of space, equipment and staff, wherever possible, are practical steps towards reduction of excessive asset costs. This approach is promoted throughout these Guidelines.

### 00.03 Role Delineation of Health Facilities

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#### GENERAL

In those jurisdictions that use a role delineation model for categorising clinical and clinical support services, the role level of a service describes the complexity of the clinical activity undertaken by that service and is chiefly determined by the availability of medical, nursing and other health care personnel who hold qualifications compatible with the defined level of care plus teaching and research responsibilities.

As part of the planning process, the range and complexity of services to be provided by Health Care Facilities will be predetermined and approved by each jurisdiction.

The Levels of Service referred to in Schedules of Accommodation in these Guidelines are currently based on the NSW Health 'Guide to the Role Delineation of Health Services' (Third Edition, 2002). The Guide to Role Delineation Guide is not available on the NSW web site but can be obtained from NSW Health Statewide Services Development Branch.

#### NEW SOUTH WALES

In NSW, in addition to Role Delineation, NSW also categorises its health care facilities into Peer Groups. These definitions may be found in NSW Health Services Comparison Data - 1999-2000, Volume 2, Casemix Measures.

[www.health.nsw.gov.au/pubs/h/pdf/yellowbook\\_vol2\\_99-00.pdf](http://www.health.nsw.gov.au/pubs/h/pdf/yellowbook_vol2_99-00.pdf)

### QUEENSLAND

In Queensland, specific information on service levels may be found in the report Clinical Services Capability Framework, Public and licensed private health facilities, Version 2, July 2005:

Section C - Service Capability Profiles

[www.health.qld.gov.au/legislation/reviews/clinical\\_framework/28712\\_section\\_C.pdf](http://www.health.qld.gov.au/legislation/reviews/clinical_framework/28712_section_C.pdf)

Section E - . Map of Role Delineation of Health Services to Clinical Services Capability Framework

[www.health.qld.gov.au/legislation/reviews/clinical\\_framework/28712\\_section\\_E.pdf](http://www.health.qld.gov.au/legislation/reviews/clinical_framework/28712_section_E.pdf)

### WESTERN AUSTRALIA

In Western Australia, a system of categorising hospitals is used e.g. “tertiary”, “general”, “specialist”, “other” as well as levels of service. Details may be found in the report - WA Health Clinical Services Framework 2005-

2015. <http://www.health.wa.gov.au/hrit/csf/docs/clinicalframework.pdf>

## 00.04 Capital Development Guidelines

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### GENERAL

Each jurisdiction will apply guidelines to capital works projects in accordance with their local legislative and other requirements where available for capital works development. Jurisdictions without their own role delineation (ACT, Tasmania and New Zealand) may have access to another jurisdiction’s documents.

### NEW SOUTH WALES

NSW Health: Assets and Contracts - Process of Facility Planning [www.health.nsw.gov.au/assets](http://www.health.nsw.gov.au/assets)

### QUEENSLAND

Queensland Health: Works Division, Capital Works Management Framework [www.build.qld.gov.au/amps/amps03a.asp](http://www.build.qld.gov.au/amps/amps03a.asp) in conjunction with: The Integrated Planning Act 1997, State Purchasing Policy and The Financial Administration and Audit Act 1977.

### SOUTH AUSTRALIA

Government of South Australia: Construction Procurement Policy, Project Implementation Process, December 2005.

[www.dais.sa.gov.au/webdata/resources/files/pip.pdf](http://www.dais.sa.gov.au/webdata/resources/files/pip.pdf)

### VICTORIA

Victoria Department of Human Services: Capital Development Guidelines [www.dhs.vic.gov.au/capdev.htm](http://www.dhs.vic.gov.au/capdev.htm)

### WESTERN AUSTRALIA

Health Reform Implementation Taskforce WA Health Infrastructure Development

<http://www.health.wa.gov.au/hrit/infrastructure>

#### **POST-OCCUPANCY EVALUATION (POE)**

Post-occupancy evaluation is the final stage of a capital works project and methodology guidelines are under development.

### **00.05 Cost Planning Guidelines**

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Cost planning guidelines are required to provide a framework for the uniform preparation and presentation of costs for all projects. The deliverables for cost plans at various stages of capital projects are defined in the Guidelines.

The deliverables for Cost Plans at various stages of capital projects are clearly defined in these Guidelines.

#### **NEW SOUTH WALES**

The Guidelines may be found on [www.healthdesign.com.au/nsw.hfg](http://www.healthdesign.com.au/nsw.hfg)

#### **VICTORIA**

Similarly, Victorian benchmarks may be found in the HHS Capital Development Guidelines.

[www.dhs.vic.gov.au/capdev.htm](http://www.dhs.vic.gov.au/capdev.htm)

### **00.06 Cost and Area Benchmarks**

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Refer to respective jurisdictions for advice on cost and area benchmarks.

#### **NEW SOUTH WALES**

NSW Health can provide benchmarks for area and capital cost rates for capital projects.

#### **VICTORIA**

Similarly, Victorian benchmarks may be found in the HHS Capital Development Guidelines.

[www.dhs.vic.gov.au/capdev.htm](http://www.dhs.vic.gov.au/capdev.htm)

### **00.07 Recurrent Costs**

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Recurrent costs of new facility proposals must be fully analysed and estimated at feasibility and project definition stages in the planning process, and then progressively refined as the project proceeds. It is critical that client groups and designers ensure that future facilities are sized to provide only those services for which recurrent funds will be available under future funding and resource allocation projections.

Prior to embarking on the capital planning process, contact should be made with the relevant health department personnel who can provide information on recurrent costs.

Facility design and construction should take due consideration of the cost of maintenance as part of the overall lifecycle costs of the Facility.

Refer to Part E - Building Services and Environmental Design.

And - in Western Australia - Health Facility Guidelines for Engineering Services 2006.

<http://www.health.wa.gov.au/hrit/infrastructure/procedures/facility.cfm>

For every project, a financial impact statement or similar should be prepared that sets out the current format for an operating budget. Each jurisdiction will need to follow their own department requirements for preparing operating budgets.

Examples of planning and design decisions that may impact on operating costs include:

- the potential to make the best use of staff skills by collocation of like facilities;
- designs that increase staffing needs due to impact on Operational Policies, such as the increased need for porters if small store rooms necessitate more frequent deliveries of consumables;
- clustering of areas to allow sharing of common spaces;
- the impact on maintenance costs of:
  - extensive glazing;
  - use of low maintenance equipment and building fabric/finishes utilising pre-finished materials;
  - protection of finishes;
  - accessibility of in-ceiling services;
- the selection of low maintenance furniture, fittings and equipment;
- additional lighting costs that may result from a deep design that does not offer opportunities for natural lighting; and
- costs resulting from common law (negligence) and Workers Compensation claims for injuries to patients, staff or visitors if facility design does not support safety.

### 00.08 Environmentally Sustainable Design

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All governments are committed to the principles of environmentally sustainable design in observance of a commitment to meet ecological obligations with regard to resource use, water consumption, energy conservation and waste management. Every effort should be made in public capital works projects to reduce the cost of energy, water usage and to eliminate pollutants in our environment, especially greenhouse gases, but without compromising patient and staff safety and comfort.

A capital project provides an ideal opportunity to address these issues and to include design features, equipment choices and operational practices that eliminate previously unacceptable practices.

Each jurisdiction requires certain reports to be completed or guidelines to be followed under relevant Acts.

Also refer to Part E of these Guidelines.

#### NEW SOUTH WALES

The Environmental Performance for Buildings Reports are to be completed for the Predesign, Design, Construction and Operation stages and submitted to NSW Health. The Environmental Performance Guide for Buildings is available from [www.asset.gov.com.au/EnvironmentGuide](http://www.asset.gov.com.au/EnvironmentGuide)

Also refer to TS11 - Engineering Services and Sustainable Development Guidelines, Version 1.1, December 2005.

#### QUEENSLAND

Refer to the Department of Public Works Energy Conservation and Management Manual for Government Departments in conjunction with the following Acts:

- Environmental Protection Act 1994;
- Environmental Protection Regulation 1998;
- Environmental Protection (Waste) Policy and Regulation 2000 and (Interim Waste ) Regulations 1996;
- Environmental Protection (Water ) Policy 1997;
- Environmental Protection (Noise) policy 1997;
- Environmental Protection (Air) policy 1997;
- National Environment Protection Council (Queensland) Act 1994; and
- Queensland Government Sustainable Housing Regulations 2006.

Further information is available on [www.smarthousing.qld.gov.au](http://www.smarthousing.qld.gov.au) and [www.sustainable-homes.org.au](http://www.sustainable-homes.org.au)

### **SOUTH AUSTRALIA**

Refer to SA Department of Administrative and Information Services, Building Management guidance notes on ESD.

[http://www.buildingmanagement.sa.gov.au/pdf/ecologically\\_sustainable\\_development\\_planning\\_and\\_design.pdf](http://www.buildingmanagement.sa.gov.au/pdf/ecologically_sustainable_development_planning_and_design.pdf)

### **VICTORIA**

Refer to - Capital Development Guidelines, 6.5 - Sustainability, August 2004

[www.dhs.vic.gov.au/pdfs/capdev/sustainability.pdf](http://www.dhs.vic.gov.au/pdfs/capdev/sustainability.pdf)

### **WESTERN AUSTRALIA**

Refer to the WA Government sustainability website

<http://www.sustainability.dpc.wa.gov.au/>

## **00.09 Natural Disaster**

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All nominated healthcare facilities should be capable of continued operation during and after a natural disaster, except in instances where a facility sustains primary impact. This means that special design consideration is needed to protect the occupants and the essential services such as emergency power generation, heating systems, water (if applicable), etc.

Typical problems such as disruption to public utilities including water supply, sewer mains or energy supplies, may affect the operation of on-site services; however, the responsibility for maintaining these public utilities lies with others.

Appropriate construction detailing and structural provision should be made to protect occupants and to ensure continuity of essential services in areas where there is a history of earthquakes, cyclones, flooding, bushfires or other natural disasters.

In addition, consideration of disease pandemics may need to be addressed and the threat of terrorism has led to a growing need to consider this type of emergency at master planning stage.

### **POST-DISASTER FUNCTION**

At times due to a natural disaster, pandemic or major act of terrorism, health facilities may be called upon to admit patients and deliver health services that differ from their normal operations. This requirement



may affect facility design. Consult local jurisdiction health disaster preparedness bodies to ascertain any particular requirements.

### FLOODS

Consideration should be given to possible flood effects when selecting and developing a site. Where possible, facilities should NOT be located on designated flood plains. Where this is unavoidable, extra care should be taken when selecting structural and construction methodology, and protective measures against flooding should be incorporated into the design.

### EARTHQUAKES

In earthquake-prone areas, facilities should be designed and constructed to withstand the force assumptions of AS1170 Part 4 - Earthquake loads.

Also refer to Earthquake Technology - New Zealand -

[www.wellington.govt.nz/aboutwgtn/innovation](http://www.wellington.govt.nz/aboutwgtn/innovation)

[www.earthquakeengineering.com/](http://www.earthquakeengineering.com/)

NZS 1170.5: Structural design actions - Earthquake actions

### CYCLONES

In cyclonic areas, special attention should be given, not only to protection against the effects of the direct force of wind (structural detailing, special cladding fixings, cyclonic glazing etc), but also against such things as wind generated projectiles (trees, cladding, fencing etc) and localised flooding.

### BUSHFIRES

Facilities should be designed and constructed to conform to AS3959 - Construction of buildings in bushfire-prone areas. Protection against bushfires should be addressed in site selection, creation of firebreaks, fire resistant construction, sufficient water supply and building sprinkler systems (external).

Further information regarding bushfire protection may be found on the following web sites.

NSW Rural Fire Service - Planning for Bushfire Protection - [www.rfs.nsw.gov.au](http://www.rfs.nsw.gov.au)

ACT Rural Fire Service - [www.rfs.act.gov.au/](http://www.rfs.act.gov.au/)

Queensland Fire & Rescue Service - [www.fire.qld.gov.au](http://www.fire.qld.gov.au)

South Australia Country Fire Service - Bushfire Safety - [www.cfs.org.au](http://www.cfs.org.au)

Tasmania - "Bushfire - Prepare to Survive" - [www.fire.tas.gov.au](http://www.fire.tas.gov.au)

Victoria - Country Fire Authority - [www.cfa.vic.gov.au](http://www.cfa.vic.gov.au)

Western Australia - Fire and Emergency Services Authority - [www.fesa.wa.gov.au](http://www.fesa.wa.gov.au)

### COMMUNICATION SYSTEMS

Where appropriate, consideration should be given to effective long range communication systems that do not rely on ground lines to function and communication within a facility should not be vulnerable in a disaster situation e.g. between wards, departments and support services.

Consultation with local State Emergency Services is recommended to ensure arrangements are in place for long range communications assistance in the event of emergency situations or a major disaster.

## 00.10 Occupational Health and Safety

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All Australian States and Territories and New Zealand have responsibility for making laws about occupational health and safety (OH&S) and for enforcing those laws. Each health authority has a principal OH&S Act setting out requirements for ensuring that workplaces are safe and healthy. These requirements outline the duties of different groups of people who play a role in workplace health and safety.

Each OH&S Act requires employers to ensure that the workplace - including premises, work environment and plant (equipment) is safe and without risk to the health of employees and others.

Each health authority is committed to a high standard of workplace safety and minimisation of risk in the health care system by the provision of a safe and secure environment for patients, staff, contractors and visitors.

The physical environment includes the infrastructure of the Facility plus the building services and operational systems to support that physical infrastructure. Note that the definition of 'plant' in OHS legislation includes any machinery, equipment or appliance and could be viewed to include furniture, fittings and equipment.

Employers are also required by their respective Act to consult with employees on OHS and welfare matters. This includes consulting with employees when changes that may affect the health, safety or welfare of employees are proposed to premises or plant.

The OHS or WPH&S Regulations require employers to identify hazards, assess risks arising from those hazards, and eliminate or control those risks. The project team, in consultation with employees, must therefore aim to identify, assess and eliminate/control any risks associated with the design of a facility and proposed furniture, fixtures and Equipment (FF&E) prior to finalisation of the plans.

A list of the various Acts and Codes of Practice for each health authority is provided in the following sections and also refer to Part C of these Guidelines.

### CONSULTATION

During the planning and design stage, the project team should consult key coordinators who manage OH&S issues to minimise the risk of repeating any existing design problems.

Coordinators may include OH&S officer, Injury Management Coordinator, Infection Control Specialist, Ergonomic / Manual Handling Coordinator, Industrial Hygienist, Facility Manager, Security Officer and Human Resources Officer (aggression/violence).

Hazard reports, near misses, incident and injury statistics for existing facilities should be reviewed and discussed during the design stage.

### OCCUPATIONAL HEALTH & SAFETY ACTS & REGULATIONS

Some workplace hazards have the potential to cause so much injury or disease that specific regulations or codes of practice are warranted. These regulations and codes, adopted under state and territory OH&S Acts, outline the duties of particular groups of people in controlling the risks associated with specific hazards.

Note that:

- Regulations are legally enforceable; and
- Codes of Practice provide advice on how to meet regulatory requirements. As such, codes are not legally enforceable, but they can be used in courts as evidence that legal requirements have or have not been met.

### AUSTRALIAN CAPITAL TERRITORY

ACT WorkCover

- Guide to the ACT Occupational Health and Safety Act 1989; and
- Codes of Practice under the OH&S Act.

## **NEW SOUTH WALES**

### WorkCover NSW

- Occupational Health and Safety Act 2000;
- Codes of Practice;
- "Protecting People and Property - NSW Health Policy and Guidelines for Security Risk Management in Health Facilities" PD2005\_339, NSW Health, February 2005;
- Zero Tolerance Response to Violence in the NSW Health Workplace;
- PD2005\_315, NSW Health, January 2005; and
- Workplace Health and Safety: Policy and Better Practice Guide, PD2005\_409, NSW Health, January 2005 [www.health.nsw.gov.au/policies/PD/2005/PD2005\\_339.html](http://www.health.nsw.gov.au/policies/PD/2005/PD2005_339.html)

## **NEW ZEALAND**

New Zealand Injury Prevention Strategy / Rautaki Ārai Whara o Aotearoa

Ministry of Health, June 2003 [www.nzips.govt.nz/resources/publications.html](http://www.nzips.govt.nz/resources/publications.html)

Patient Handling Guidelines

[www.acc.co.nz/wcm001/idcplg?  
IdcService=SS\\_GET\\_PAGE&ssDocName=WCM001675&ssSourceNodeId=4141](http://www.acc.co.nz/wcm001/idcplg?IdcService=SS_GET_PAGE&ssDocName=WCM001675&ssSourceNodeId=4141)

Hazard Management

[www.acc.co.nz/wcm001/idcplg?  
IdcService=SS\\_GET\\_PAGE&ssDocName=WCM000660&ssSourceNodeId=4141](http://www.acc.co.nz/wcm001/idcplg?IdcService=SS_GET_PAGE&ssDocName=WCM000660&ssSourceNodeId=4141)

## **QUEENSLAND**

QLD Workplace Health and Safety

- A guide to the Workplace Health & Safety Act 1995; and
- Industry Codes of Practice.

## **SOUTH AUSTRALIA**

SafeWork SA

<http://www.safework.sa.gov.au/home.jsp>

Occupational Health Safety and Welfare Regulations 1995

<http://legislation.sa.gov.au/lz/c/r/occupational%20health%20safety%20and%20welfare%20regulations%201995.aspx>

Government of South Australia, Compliance Obligations of Building Asset Owners - A Guide for SA Government Agencies, 2004

[http://www.buildingmanagement.sa.gov.au/pdf/obligations\\_of\\_government\\_agencies.pdf](http://www.buildingmanagement.sa.gov.au/pdf/obligations_of_government_agencies.pdf)

### TASMANIA

Workplace Standards Tasmania Workplace Health and safety Act 1995. Workplace Health and safety regulations 1998

### VICTORIA

Victorian WorkCover Authority

Legislation overview

Codes of Practice

### WESTERN AUSTRALIA

Refer to Worksafe WA:

<http://www.worksafe.wa.gov.au/newsite/worksafe/default.html>

Relevant legislation:

- Occupational Safety and Health Act 1984; and
- Occupational Safety and Health Regulations 1996.

The regulations are supported by Codes of Practice covering various hazard types.

Some examples of Regulations and Codes of Practice and their relevance to facility design are:

- Regulation 3.4 and Code of Practice -Manual Handling - (equipment, patients, stores, Engineering Department large and heavy items);
- 3.10 Evacuation Procedures - (immobile patients);
- 3.13 Lighting (glare and reflections on computer screens);
- 3.18 Movement around Workplaces (pathway design for pedestrian and wheeled equipment);
- 3.27 Gas Cylinders to be Secured;
- 3.50 3.53 and COP - Prevention of falls in the workplace - (fall arrest anchor points);
- 3.82-3.87 Confined Space (Engineering Department maintenance);
- 4.55 and COP Working safely with forklifts (Stores Department design); and
- 5.20 Hazardous Substances (storage transport and handling, ventilation).

## 00.11 Accessibility

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Planning and design teams are to ensure that Health Care Facilities are suitable for people with disabilities. The needs of people with a wide range of disabilities should be identified and those needs addressed in all capital works projects.

Refer also to the Commonwealth Disability Discrimination Act 1992 (DDA).

As noted in Part A of these Guidelines, it may be prudent to employ a disability specialist to assist with compliance, and this may also be required by some local authorities.

## THE COMMONWEALTH DISABILITY DISCRIMINATION ACT (DDA)

The Commonwealth Disability Discrimination Act 1992, ... makes discrimination on the basis of disability unlawful. Under this Act all Commonwealth Government activities must be accessible to people with disabilities. This means:

- people with disabilities must have access to all parts of buildings utilised by the Commonwealth in the same way as people without a disability;
- all publicly available Commonwealth information must be able to be provided, upon request, in formats accessible to people with a range of disabilities;
- staff of Commonwealth organisations must display non-discriminatory attitudes in the workplace;
- where necessary, adjustments are to be made to the workplace so that people with disabilities have equal opportunity to use and display their skills; and
- administration of all Commonwealth laws and programs must be consistent with the DDA.

## REFERENCES

Australian Standard 1428 series (1428.1 to 1428.4) refer to access and are critical to access design.

- AS1428: Design for access and mobility; and
- AS1428.1 General requirements for access - new building work.

The NSW Health Design Series DS32 - Improved Access for Health Care Facilities 1994 may be referenced. However it does not override the Australian/New Zealand Standards (refer below), the Building Codes of Australia or New Zealand nor does it relieve users of their obligation to ensure fitness for purpose in the planning and design of Health Care Facilities.

Also refer to Part C of these Guidelines.

## NEW ZEALAND

Refer to NZS 4121: Design for access and mobility: Buildings and associated facilities.

## QUEENSLAND

Also refer to The Disability Services Act 2006

[http://www.disability.qld.gov.au/key\\_projects/disability\\_services\\_act/](http://www.disability.qld.gov.au/key_projects/disability_services_act/)

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## 00.12 Infection Control

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Infection prevention and control principles and practices have a direct impact on facility design and should be reviewed by project teams at the commencement of planning for all capital works programs. The involvement of infection control professionals and the incorporation of infection control principles and their interpretation into Facility and Unit Operational Policies ensure that relevant issues in the design and layout of Health Care Facilities have been considered and incorporated into building plans.

Infection control consultation prior to construction, renovation, commissioning or demolition work is also essential to ensure that infection risks are identified and appropriate measures put in place to reduce such risks.

Issues that require infection control input include: the number, type and location of hand basins; the number and type of isolation rooms; air handling systems; clean and dirty work flows; interior surfaces to facilitate cleaning; transportation routes etc.

Refer to Part D of these Guidelines for assessment of infection control risks and suggested physical design responses.

### **INFECTION CONTROL POLICY DOCUMENTS**

Australian Standards, HB 260 - 2003, Hospital acquired infections— Engineering down the risk.

Australian Government, Department of Health and Ageing, Infection Control Guidelines, January 2004.  
[www.health.gov.au](http://www.health.gov.au)

### **ACT**

Draft in process.

### **NEW SOUTH WALES**

Policy Directive PD2005\_247 - Infection Control Policy, January 2005.

[www.health.nsw.gov.au/policies](http://www.health.nsw.gov.au/policies)

### **NEW ZEALAND**

Standards New Zealand, NZ 8142: Infection Control,

[www.standards.co.nz/web-shop/?action=viewSearchProduct&mod=catalog&pid=8142:2000\(NZS\)](http://www.standards.co.nz/web-shop/?action=viewSearchProduct&mod=catalog&pid=8142:2000(NZS))

[www.standards.co.nz/](http://www.standards.co.nz/)

### **QUEENSLAND**

Infection Control Guidelines, November 2001.

[www.health.qld.gov.au/infectioncontrol](http://www.health.qld.gov.au/infectioncontrol)

### **SOUTH AUSTRALIA**

Infection Control Guidelines (review in progress)

<http://www.health.sa.gov.au/INFECTIONCONTROL/Default.aspx?tabid=157>

### **WESTERN AUSTRALIA**

Health Facility Guidelines for Infection Control 2006

<http://www.health.wa.gov.au/hrit/infrastructure/procedures/facility.cfm>

## **00.13 Culture and Health as an Element of Design**

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### **DEFINITION**

Culture can be defined as “the behaviours and beliefs characteristic of a particular social, ethnic, or age group: the youth culture; the drug culture.” It includes religious beliefs, customs and moral values. Culture

impacts on health issues and status such as infant & maternal mortality, life expectancy, nutrition, and prevalence of chronic conditions (refer to National Health Priority Areas in the Reference Section below).

Culture underpins the political, legislative and health systems framework in which a society operates. Within mainstream culture there are sub-cultures e.g. class, youth culture, alternative cultures, ethnic and indigenous cultures. These cultural groups will not necessarily value or react to health facilities and services in the same way as the mainstream culture and may require individual consultation. Consultation will depend on the target community profiles, functions and focus expressed in the facility brief. Responding to cultural difference is acknowledged by governments through Access and Equity policies.”

### **AUSTRALIAN GOVERNMENT POLICY**

Health services must comply with the Charter of Public Service in a Culturally Diverse Society.

[http://www.immi.gov.au/about/charters/\\_pdf/culturally-diverse/charter.pdf](http://www.immi.gov.au/about/charters/_pdf/culturally-diverse/charter.pdf)

The Charter supports the Government’s commitment to implement its Access and Equity Strategy, was endorsed by Australian state and territory governments and by the Australian Local Government Association in 1998, and represents a nationally consistent approach to the delivery of culturally responsive Government services.

The purpose of the Charter is to ensure that Government services meet the particular needs of people from diverse linguistic and cultural backgrounds so that they can participate fully in economic, social and cultural life. The Charter summarises seven principles central to the design delivery, monitoring, evaluation and reporting of quality government services in a culturally diverse society: these principles are access, equity, communication, responsiveness, effectiveness, efficiency and accountability.”

### **NEW ZEALAND POLICIES**

He Korowai Oranga: Māori Health Strategy sets the direction for Maori health development in the health and disability sector. Refer to:

<http://www.moh.govt.nz/mhs.html>

Accompanying the strategy is Whakatātaka: Maori Health Action Plan 2002-2005, which outlines what the Government will do to implement the strategy. Links to other relevant documents (health of older people, youth, Alcohol

and Drug etc) are listed and are accessible through the Maori Health Action Plan. Refer to:

<http://www.moh.govt.nz/moh.nsf/49ba80c00757b8804c256673001d47d0/e09b7f5eb0a2665ccc256c70007d22ec?OpenDocument>

### **CONSULTATION PROCESS**

Project staff need to understand, through stakeholder consultation, the culture or cultures of the client population of the facility/unit to be designed to ensure, as far as possible, its cultural sensitivity and appropriateness. This consultation should be factored in to the planning process - it should not be an afterthought.

Health facility outcomes are reliant on the quality of the health data and stakeholder consultations. Each jurisdiction will have relevant bodies that can provide community organization and representative contacts, equity priorities, health status information, strategic service plans and systems performance data. It may be necessary to engage a health planner / consultant with specific experience in health planning issues for particular groups identified as significant.

### **GROUPS WITH SPECIAL NEEDS**

Groups with special needs include:

- migrants especially those from non-English speaking backgrounds;

- refugees (issues of torture and trauma);
- women, particularly of child-bearing age;
- children and young people;
- indigent populations;
- rural and remote communities;
- specific religious groups such as Jews and Muslims;
- Aboriginal and Torres Strait Islanders (ATSI). The Commonwealth Department of Health and Ageing has a specific Office for Aboriginal and Torres Strait Islander Health (OATSIH) with a Capital Management section that can provide information on development of ATSI health facilities. Refer to: <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-oatsih-about> <http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-oatsih-pubs-index.htm> ; and
- Maori and Pacific Islanders in New Zealand. It must be stressed that the New Zealand Maori population, under the Treaty of Waitangi, share equal rights with the Crown and recognition of these rights is an inherent element of the briefing process.

### AREAS AND FUNCTIONS REQUIRING SPECIAL CONSIDERATIONS

Areas and functions requiring special consideration:

- birthing and maternity customs;
- death and dying and associated rituals/customs;
- interpreter services: face-to-face and telephone;
- way finding: with reference to disability, literacy and language/s;
- food services and special dietary needs (e.g. halal, kosher);
- spiritual needs (prayer room, chapel, ablutions);
- modesty and gender separation (bathing, change cubicles, waiting etc);
- privacy for counselling;
- facilities for large family groups (e.g. New Zealand Wahanau Rooms); and
- access to outdoor areas including amenities (toilet & shower) for people from remote areas travelling for long periods to attend clinics etc and need the opportunity to clean up.

N.B. These areas and functions are included as guidelines only. Other areas and functions may be significant depending on the individual situation. Stakeholder consultations and strategic plans may indicate addition issues

to be considered.

### CEREMONIES

Smoking ceremonies are conducted by Aboriginal people with specialised cultural knowledge with the aim of cleansing the space in which the ceremony takes place (both building/s and external spaces) to remove "bad spirits". These ceremonies can occur throughout the life of the building.

In particular, due to the nature of Aboriginal health clinics it would be common to smoke all the rooms:

- prior to occupying the building; and
- following a death within the building.



The impact of the ceremony on engineering services in the context of the building is very minimal. A fire is started in a drum (5 gal); the flames are then smothered with green vegetation and extinguished. The buckets are then carried by hand through the necessary rooms of the building; they are not left in the rooms. There is no smoke damage to the facilities and a very minimal amount of heat associated with the generation of the smoke. The only requirement would be to isolate any smoke alarms and fire detection equipment prior to commencing the event. The smoke can be cleared after the event by mechanical ventilation and opening windows within an hour.

In New Zealand, a welcome ceremony, a pohiri or powhiri, is performed in new facilities but has no implications for the building design.

### **SACRED SPACES AND RELIGIOUS OBSERVANCE**

It is now normal practice for hospital Chaplaincy / Pastoral Care teams to include representatives of all the major faiths, especially in areas with culturally diverse populations. In terms of space, these teams require offices and rooms for counselling, as well as chapels/prayer rooms, ideally all close together and in an accessible part of the hospital. A space for prayer, meditation and contemplation should evoke a different world from the healthcare building where it is set. This may be neutral space, a space for each religion, or a space expressing various faiths through a synthesis.

Consideration also needs to be given to ablution facilities (essential need for Muslims, separate for males and females, for obligatory ablution before prayer), provision and storage of items such as prayer mats, and space for changing or leaving 'outside' clothes, shoes etc.

In New Zealand, health care facilities will usually additionally provide a Maori Health Unit and Whanau (family) rooms as part of the standard ward design. This can be used by Maori families (and others) as a place for families to meet, wait, and in some cases for the family to be with the recently

deceased family members (Te Papaku).

### **SPECIFIC HEALTH PLANNING UNITS (HPUs)**

Although many HPUs may require consideration of cultural issues as part of the briefing and design process, the following HPUs (the list is not inclusive) require particular consideration, and more detailed information is/will be provided in the planning sections of the HFG for these units:

Emergency Unit;

- Inpatient Units;
- Kitchens;
- Maternity and Birthing Units;
- Mental Health Units;
- Mortuary;
- Paediatric Facilities; and
- Palliative Care.

### **REFERENCES**

Project staff are recommended to read "Creating Culturally Sensitive Healthcare Environments, A Report to NHS Estates, with Mark R.D. Johnson et al, June 2004".

Unfortunately this report was never published but permission has been given to make it available on the Centre for Health Assets Australasia website - [www.CHAA.net.au](http://www.CHAA.net.au) under Links and References.

## COMMONWEALTH GOVERNMENT

Department of Health and Ageing: National Health Priority Areas

<http://www.health.gov.au/internet/wcms/publishing.nsf/Content/Health+Priorities-1>

The National Health Priority Areas are: cancer control, injury prevention and control, cardiovascular health, diabetes mellitus, mental health, asthma, and arthritis and musculoskeletal conditions.

Cultural Respect Framework for Aboriginal and Torres Strait Islander Health 2004-2009 Australian Health Ministers' Advisory Council March 2004.

## NEW SOUTH WALES

Multicultural Health Services and Programs, Prepared by the NSW Multicultural Health Communication Service, May 2002.

<http://www.mhcs.health.nsw.gov.au/mhcs/subpages/material/booklet.pdf>

Aboriginal Participation in Construction Guidelines, (Applying to Projects commencing 1 January 2007). NSW Department of Commerce.

## NEW ZEALAND

He Korowai Oranga: Māori Health Strategy <http://www.moh.govt.nz/mhs.html>

For the Whakatātake: Māori Health Action Plan 2002-2005, refer to:

<http://www.moh.govt.nz/moh.nsf/49ba80c00757b8804c256673001d47d0/e09b7f5eb0a2665ccc256c70007d22ec?OpenDocument>

## QUEENSLAND

Cultural Diversity - A Guide for Health Professionals, December 2003.

<http://www.health.qld.gov.au/multicultural/cultdiv/default.asp>

Guidelines for the Planning, Design and Building of Primary Health Care Facilities in Indigenous Communities

<http://www.health.qld.gov.au/cwamb>

## VICTORIA

Department of Human Services: Cultural Diversity Guide, Planning and delivering culturally appropriate human services, reprinted June 2006.

[http://www.dhs.vic.gov.au/multicultural/downloads/cultural\\_diveristy\\_guide\\_2006.pdf](http://www.dhs.vic.gov.au/multicultural/downloads/cultural_diveristy_guide_2006.pdf)

## WESTERN AUSTRALIA

Refer to Aboriginal Cultural Respect - Implementation Framework document

<http://www.aboriginal.health.wa.gov.au/>

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## 00.14 Engineering Services / Standards

Refer to Part E of these Guidelines and - in NSW to TS11 and in WA to Health Facility Guidelines for Engineering Services 2006 regarding the design and installation of engineering services in new and refurbished premises.

Note that these guidelines and technical reports do not override the requirements of the Australian and New Zealand Building Codes nor the Australian/ New Zealand Standards.

## 00.15 Information Technology / Communications

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### GENERAL

All capital projects will have an information and communications technology component. This could include the provision or upgrade of the infrastructure, new or upgrade of equipment and installation of new health information management systems.

It is recommended that all proposals for funding be discussed with the relevant health jurisdiction prior to formal submission, processes for which will depend upon the type and scale of the proposal.

Proposals must be consistent with each jurisdiction's ICT strategies and are expected to comply with the relevant technical standards as appropriate to the project;

Health information developments and investments included in capital works projects must support current clinical practices.

### NEW SOUTH WALES

In NSW, proposals requiring state capital funding should be submitted to NSW Health and be in accordance with the Shared Corporate Services Strategy as managed by NSW Health. The process for funding for Information and Communications Technology Proposals is outlined in Treasury Circular TC 03/10.

[www.treasury.nsw.gov.au/pubs/03\\_tcirc/tc\\_03ind.htm](http://www.treasury.nsw.gov.au/pubs/03_tcirc/tc_03ind.htm)

Also refer to Information Management Strategy 2002.

[www.health.nsw.gov.au/pubs/a-z/i.html](http://www.health.nsw.gov.au/pubs/a-z/i.html)

### QUEENSLAND

In Queensland, capital projects must comply with the Queensland Government, Information and Communication Technology (ICT) Cabling Standards (IS32) and Queensland Health ICT Cabling Standard ISO934. IS32 can be found at

[www.governmentict.qld.gov.au/02\\_infostand/standards/is32.htm](http://www.governmentict.qld.gov.au/02_infostand/standards/is32.htm)

### SOUTH AUSTRALIA

In South Australia, capital projects must comply with the minimum technical and functional parameters outlined in the Department of Health, ICT Services document "Standards definition for the installation of a structured cabling system".

This document is available from:

Manager Network Services

ICT Services

44 Waymouth Street

Adelaide SA 5000

Tel: (08) 8226 7352

## 00.16 Standards & Codes

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Refer to Standards Australia for information regarding standards that may be relevant to a particular project. Standards Australia also produces handbooks and guides on various topics and subjects. The web address for further information is [www.standards.com.au](http://www.standards.com.au)

In New Zealand, refer to Standards New Zealand at [www.standards.nz.co/](http://www.standards.nz.co/)

Although generally desirable, compliance with Standards is not mandatory unless cross-referenced by the relevant Building Code or other statutory legislation.

In other situations, compliance with Standards, Codes, Guides or Handbooks is not required unless specifically noted by these Guidelines.

## 00.17 Furniture, Fittings and Equipment (FF&E)

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The health system has significant purchasing power and the purchase of furniture, fittings and equipment should be carried out in accordance with each jurisdiction's policy.

Also refer to Part F of these Guidelines - Project Implementation - FF&E for further information.

## 00.18 Fixtures, Fittings & Equipment

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### NEW SOUTH WALES

The Purchasing and Supply Manual for Public Health Organisations, January 2006. [www.health.nsw.gov.au/audit/manuals/purch\\_supply.pdf](http://www.health.nsw.gov.au/audit/manuals/purch_supply.pdf)

### QUEENSLAND

Queensland Government Better Purchasing Guides: [www.qgm.qld.gov.au/02\\_policy/better\\_purch.htm](http://www.qgm.qld.gov.au/02_policy/better_purch.htm)

### VICTORIA

Victorian Government Purchasing Board: [www.vgpb.vic.gov.au/CA256C450016850B/0/4FBAC7BE2075606FCA256C850025DA77?OpenDocument](http://www.vgpb.vic.gov.au/CA256C450016850B/0/4FBAC7BE2075606FCA256C850025DA77?OpenDocument)

## 00.19 Operational Policies

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### OVERVIEW

Operational Policies define the "What, How, When, Where, Who and With What" of any process. They are a critical factor in the implementation of a desired service model and the achievement of targeted capital and recurrent costs. They should be documented early in the planning process in 'broadbrush' terms to assist in selection of the recommended capital option. The impact of new technology and changing clinical work practices should be reviewed prior to commencing capital planning.

Operational Policies should be developed by the Project Team in consultation with health service stakeholders and require a determination of not only what current practices will continue in the future but also what new practices will be implemented and the process for change management where this is required. This process of reviewing and documenting Operational Policies is valuable as it subjects the current operation of a Facility or Unit to scrutiny.

Project teams should constantly review their design proposals with the Operational Policies in mind and be able to demonstrate that the capital and recurrent cost implications of proposed operational policies have been fully evaluated and the most cost-effective and efficient solutions are being proposed and developed,

as the planning effects of operational policy decisions are often not apparent until planning has commenced and the consequences can sometimes be quite different to those expected.

Operational Policies may be overarching policies across an entire Health Care Facility or health service network or may be specific to one Health Planning Unit such as the Emergency Unit.

The specific operation of a Unit will reflect the demographic profile of the anticipated users of the service (patients, consumers) the clinical characteristics of the patients and the defined role of the Unit including its place within the service network.

Operational Policies are significant in the design process as they can have an impact on the size, configuration and the nature of accommodation. Operational Policies not only act as a specific guide to the operation of each group of spaces, but also as a frame of reference for the workings of the whole Facility.

Operational Policies should be consistent across health facilities within an Area Health Service or Network to the extent dictated by the role and service delineation of the individual facilities. The Operational Policies should also respond to, and incorporate policies of other services within the Area Health Service so as to ensure a patient focussed continuum of care. Admission and discharge policies would be two key examples.

In the design phase, the operational policies, traffic and workflow diagrams will be used by the architects, engineers and facility planners to ensure that the range of activities and requirements are reflected in the design. At this stage, necessary compromises can be discussed or changes made where there are financial, building and other constraints.

A general description of a generic set of Operational Policies to be developed to inform the design and planning process follows.

### **LIST OF OPERATIONAL POLICIES**

Admissions

Amenities for Patients and Visitors

Amenities for Staff

Cleaning

Clinical Information Communication Systems Consultation and Interviews Disaster Planning Equipment Storage

Food Services

Infection Control Linen Management Maintenance and Engineering Medication Management Operating Hours

Pastoral Care

Pharmacy

Safety and Security Sterilising Services Stores and Supplies

Vehicle Access and Parking

Waste Management

### **ADMISSIONS**

#### **Summary**

The admission process has two main components - the 'administrative' process and the "clinical (medical / nursing / allied health) admission / assessment process' and may occur in a number of locations.

#### **Options**

The admission process may be conducted in a dedicated Admissions Unit - usually in or near the Main Entry, within a Unit (inpatient unit, day procedure unit, operating suite etc) or in the Emergency Department.

Note that with the increase in pre-admission clinics and day only procedures, day surgery and day-of-surgery, where admission will often occur within the actual unit, the need for a dedicated Admissions Unit needs to be carefully considered and the availability of staff ascertained.

### **Implications**

Space (waiting areas, interview rooms etc) and personnel (workstations) requirements will vary depending on the source and location of admissions e.g. Emergency Department, Day Only Units, Operating Units etc and associated Operational Policies.

Access routes to the Unit/s should also be considered.

## **AMENITIES FOR PATIENTS AND VISITORS:**

### **Summary**

Provision of appropriate patient amenities enhances the quality of a patient's or visitor's hospital experience and often assists in minimising stress.

### **Options**

Amenities may include waiting areas, gardens, toilets, baby change and baby feeding facilities, kiosks, quiet rooms etc. They may extend to provision of sleeping accommodation in Palliative Care or Paediatric Units, or on-site accommodation for relatives, patients from remote locations or from poor socio-economic circumstances.

The provision of accessible toilets for people with disabilities as a ratio of all toilets will be determined in accordance with the acuity and dependency levels of patients and the needs of visitors, and planners should refer to the Australian and New Zealand Building Codes.

### **Implications**

The extent and location of amenities for patients and visitors will impact on planning of both the whole Facility and specific Units where they are needed.

## **AMENITIES FOR STAFF**

### **Summary**

Occupational Health and Safety Acts and Regulations require employers to provide for the welfare of employees and to consult with employees when providing facilities for their welfare.

BCA requirements are the minimum standard for provision of staff amenities.

The provision of appropriate staff amenities may influence the ability of a Health Care Facility to attract and retain staff and consultation with staff regarding the type and quality of facilities is an essential part of facility design.

Infection control requirements may also determine the need for amenities such as showers and change rooms.

### **Options**

Staff amenities will include showers and toilets and either change rooms or secure storage areas for property i.e. handbags, clothes, etc.

In addition, Staff Lounges and/or Cafeterias may be provided depending on the size, function and location of individual units and/or the Facility.

The need for central amenities in addition to unit-based amenities will need to be addressed.

In order to support and encourage a healthy workforce, “end of trip” facilities for cyclists should also be considered.

### **Implications**

The extent and location of amenities for staff will impact on planning of both the whole facility and specific Units where they are needed.

## **CLEANING**

### **Summary**

Cleaning services may be provided by facility staff or by an external contractor. The time, frequency and methods of cleaning will determine the amount of storage space required for equipment and cleaning products within the Unit and the overall Facility.

### **Some Options**

The most common option - particularly if services are provided by facility staff - is a centralised Housekeeping Unit comprising necessary offices and stores for equipment and dry goods, and small Cleaners' Rooms strategically located throughout the Facility. The latter also provide a supply of cleaning materials and equipment for staff to use in emergency situations or out of hours.

### **Implications**

Allocation of space for storage of cleaning equipment, chemicals and consumables within the Unit or Facility.

Consumables such as toilet paper, paper hand towels, etc must be stored separately from cleaners' wet area / equipment to prevent cross contamination with moisture and exposure to equipment used throughout patient care areas.

Design, layouts, fittings, furnishings, floor coverings and other finishes will have a significant impact on the cleaning of the Unit. Ledges, corners and all other surfaces that are difficult to clean or hard to reach should be minimised.

Facilities such as power outlets, particularly in corridors and hand washing facilities should be provided in appropriate locations to enable staff to efficiently clean the Unit.

## **CLINICAL INFORMATION**

### **Summary**

The requirements for the Clinical Information Health Planning Unit itself can be found in Part B of these Guidelines. However, methods for delivery of medical records to and within a Facility or Unit should be clearly defined.

### **Some Options**

The trend is towards one centralised record per patient within a health service so reducing the multiplicity of records that often occurred in the past across health service providers.

Whilst considerable advances have been made towards electronic record systems, most health care facilities still operate a paper-based system and are likely to do so for some time yet. Should an electronic medical record system be planned, this will have major implications in terms of IT requirements and space for workstations, computers, etc to access and manipulate the records both within and outside the Clinical Information HPU.

### Implications

The methods for transporting records to their point of use (trolleys, mechanical transport system) will need to be determined and secure storage for paper records must be provided in staff stations and reception areas.

In all situations, the security and handling of confidential patient information and records must be addressed.

Staff must have safe access to records after hours.

## COMMUNICATION SYSTEMS

### Summary

A wide range of information and communications technology options are now available to a Health Care Facility.

The primary objectives of communication facilities are.

- to improve work efficiency;
- to make clinical information more readily available to staff ;
- to assist staff to provide better service to patients;
- to assist patients to maintain contact with staff and with their relatives and friends and access entertainment and education material.

Communication facilities will be required to comply with each judiciary's strategies and policies, plus many are subject to regulatory control. Therefore early advice should be sought regarding these.

### Some Options

The communication strategy chosen will depend on various issues including size of Facility, location, locally available technology, the available technical support and advances in technology.

Options to be considered may include:

- Teleconferencing;
- Videoconferencing;
- Teleradiology;
- Telepsychiatry;
- Telepathology;
- Bedside data ports;
- Telemetric monitoring;
- Handheld computing;
- Barcode scanning; and
- Fingerprint, handprint and voice recognition security systems;

This is in addition to the more 'standard' provision of systems covering:

- Computers
- Telephones - land lines and - increasingly - mobile phones;
- Intercom systems;
- Dictation/transcription;
- Data communication - facsimile, email and intranets;



- Nurse call and emergency call systems;
- Emergency Warning Intercommunication System (EWIS);
- Public address;
- Pocket paging;
- Personal duress alarms; and
- MATV distribution.

### Implications

The Communications strategy and the Information Management & Technology strategy for a Facility are usually integrated.

In considering the strategy to be adopted, including all component parts, a careful analysis of options, including costs, flexibility and future adaptability is required.

The aim, where possible, should be the 'future proofing' of communications infrastructure even though this may be difficult to achieve.

### CONSULTATIONS AND INTERVIEWS:

#### Summary

Clinical consultation involving physical examination should always take place in appropriately equipped Consultation/Examination Rooms - see Standard Components in these Guidelines.

Interview Rooms are required to fulfil functions such as:

- Clinical consultation not involving physical examination
- Interviewing patients (often with family/friends) on admission to a Facility or on discharge for purposes such as explaining follow-up care, arranging transport, paying of accounts etc;
- Interviewing patients (often with family/friends) on first attendance for treatment or for pre-admission assessment for surgical treatment or day procedure (although the former may more frequently occur in a Consultation / Examination Room);
- Interviewing / supporting grieving family/friends
- 'Family conferences' where clinical staff address treatment issues with family/friends with or without the patient present; and
- Formal and informal teaching space for small groups.

#### Some Options

The interview / clinical consultation function may be incorporated into individual offices which will increase the size of offices and also the number of enclosed offices required.

Alternatively, interviews may be conducted in shared Interview Rooms' this option is more flexible and reduces the overall space allocated to individual office accommodation. This will require a commitment to an efficient scheduling system to meet the requirements of those using these spaces.

#### Implications

The major implications of the approach to be taken should be assessed in terms of the privacy and convenience for patients and staff, and the reallocation of space from Offices to Interview Rooms. The safety and security of staff, patients and visitors is a prime consideration and in certain situations a second egress door may be required e.g. Mental Health.

## DISASTER PLANNING

### Summary

Towards the end of both the Schematic and Design Development phases of a project a specialist review session should be held to:

- consider the role the health facility will play in case of disaster;
- consider the potential disasters that could occur within the hospital setting and those that could occur outside the hospital setting;
- consider the implication that those potential disasters could have on the proposed design;
- review how the design will respond to the potential disaster/s;
- develop actions to amend the design as required;
- review existing and develop new operational policies for disaster management to complement the new design; and
- document Operational Policies for future implementation.

### Some Options

Examples of the types of disasters that will need to be reviewed are:

- those occurring within the hospital setting e.g. loss of back-up energy, fire, loss of gas supply; and
- those occurring external to the hospital setting e.g. singular traumatic events affecting a large number of people, such as use of gas, nuclear, biological or chemical agents, earthquake, fire or rapid spread of disease such as SARS.

### Implications

Some examples of issues that may impact on the design are:

From those occurring within the hospital setting:

- areas such as Intensive Care and Operating Units will require uninterrupted power supply systems to cope with loss of generator back up supply systems; and
- are the paths of fire egress suitable for staff, ambulatory and bedridden patients and if not, can the design and Operational Policies be reviewed to address this issue.

From those occurring outside the hospital setting:

- does the design provide facilities for appropriate decontamination of personnel and equipment as required;
- are the proposed air-conditioned environments appropriate for potential disasters including smoke and heat generated by bushfires;
- has a disaster control facility been incorporated into the design in an identified area;
- does the path from the helipad or nominated helicopter landing site provide for ease of access; and
- is it possible to design the Building Management System to respond to disaster situations.

## EQUIPMENT STORAGE

### Summary

The increasing dependence on medical equipment including non-invasive ventilatory support, monitors for oximetry, blood pressure monitoring and testing equipment has increased demands for storage space and has significant implications for FF&E budgets.

### Some Options

Designated equipment may be stored at or near each bed space / point of use.

Additionally, a central storage space will be required for each Unit or cluster of Units and/or for the entire Facility. Centralised storage offers a number of economies and efficiencies but requires a commitment to effective management, record-keeping, cleaning and safe storage of shared equipment to ensure that it is available when required. There are also implications for the maintenance and regular calibration of such equipment.

### Implications

Where equipment is to be stored at the bed space, adequate space to use and service it must be provided.

Storage of patient manual handling equipment must be considered in locations convenient to use.

Central storage must be safely accessed by staff during the day and after hours.

Sufficient power points for recharging equipment must also be provided.

## FOOD SERVICES

### Summary

The Food Services Unit provides meals, snacks and beverages for inpatients, day-only patients, occasionally for relatives, and for staff. It may cater for functions on request and may also provide a 'Meals-on-Wheels' service, especially in rural or regional areas.

Catering for staff may range from provision of beverage-making supplies to wards and departments to a full cafeteria service which latter may be privately-operated either by the Facility or by an outside contractor.

Meals may be prepared and delivered to patients and staff in a number of different ways.

### Some Options

Options for food preparation include:

- cook fresh - Patient meals and beverages are prepared from fresh ingredients and plated hot in the Main Kitchen before delivery to the wards and departments. The system may be supplemented by a "cook-freeze" system to provide selected menu items for other sites;
- cook freeze - Selected menu items including main meals, desserts and a limited range of vegetables and modified consistency items may be prepared in bulk in a central Kitchen, packed into foil containers of between 1 and 12 serves, frozen and boxed for delivery to outlying sites where they are reconstituted; and
- cook chill - This system is based on cooking food until thermal kill is achieved followed by rapid controlled chilling that reduces the food temperature to below -3°C within a specified time. Storage at this temperature extends the shelf life of the product for between 5 and 45 days depending on the system used.

Meals are plated cold and trayed in rethermalisation carts that are divided vertically in two sections. The carts are then connected to terminals and both sections are refrigerated. Prior to serving, the terminals are activated and the hot part of the trays will be rethermalised while the cold products remain chilled.

### Implications

The needs of people with special dietary requirements must be considered when determining food services operational policies. The capacity to produce special meals must be available.

The spatial needs of each preparation and delivery method vary and will impact not only on the central Food Services Unit within the Facility but also on the planning of individual Units. Small beverage bays / pantries, trolley parking bays or trolley re-heat bays or even Activities of Daily Living (ADL) kitchens may be needed in those areas where ADL activities are offered.

Also Refer to Part D - Infection Prevention and Control.

### INFECTION CONTROL:

#### Summary

Consideration of infection control principles is fundamental to the design of Health Care Facilities. Refer to Part D of these Guidelines for assessment of infection control risks and suggested physical design responses.

Interpretation of infection control principles into Facility and Unit Operational Policies and associated briefed spaces is part of briefing a project.

#### Some Options

The design and layout of all new or renovated Health Care Facilities should take account of the movement of people and incorporate all necessary physical requirements to minimise the transmission of infection.

#### Implications

Separation of “clean” and “dirty” work flows: Clean and dirty corridor planning for Operating Units is the clearest example of this. However the single corridor Operating Suite is increasingly the norm and provides fewer planning constraints to the design team.

The inclusion and location of handwash bays/basins is a less dramatic but no less critical example.

### LINEN MANAGEMENT

#### Summary

The procedures for the delivery and storage of clean linen and the removal of dirty linen impact on the planning for an individual Unit and on the whole Facility with particular regard to trolley movements.

#### Some Options

Laundry facilities may be located on or off campus. Depending on the location of the Laundry and transport methods, a Clean Loading Dock and temporary holding area will/may be required.

Clean linen may be delivered on an imprest trolley exchange system on a regular basis - usually daily plus once on the weekend. Alternatively, clean linen may be delivered and unpacked onto storage shelves or into cupboards; however this is a much more labour intensive approach and should be avoided if possible.

Dirty linen should be sorted at point of use and stored in appropriate receptacles to await pickup. This may be in the Dirty Utility Room or in a Disposal Room in individual units and a Soiled Linen Holding Area with dock access.

### Implications

There should be policies and procedures in place for the safe manual handling of linen.

How linen is delivered and removed, in what type of trolley, cart or bin, how often and in what quantity, will affect sizes and placement of linen bays and cupboards and of central linen receipt and holding areas.

It is essential that clean linen is stored separately from dirty linen.

Depending on facility requirements, different types of linen may have different laundering requirements e.g. patient clothes or special items (such as may be necessary in longer term care facilities) may be processed in a laundry within the Unit or on the site, with other items sent off site to a central, District or commercial laundry.

Ensuring adequate clean linen delivery and pickup of soiled linen occurs is also a management issue for the Unit that will relate to the storage areas available for both.

Also Refer to Part D - Infection Prevention and Control.

## MAINTENANCE AND ENGINEERING

### Summary

Health service premises, furniture and equipment will all require regular inspection and maintenance. Biomedical equipment will also require regular testing and calibration.

### Some Options

Maintenance and engineering services may be provided by Facility staff or by contractors, or by a mix of both. They may be provided at a facility level or across an Area or other network of facilities. This will depend on the Service Level Agreement.

For staff and some contractors, maintenance facilities including indoor and outdoor covered work areas plus storage for tools and materials may be required on the facility site.

### Implications

Maintenance contracts and work methods will impact on the need for work areas and storage on or off the site.

If performed on site, materials and equipment will be delivered and waste materials removed from maintenance work areas. To avoid any noise problems the maintenance work areas should not be located close to patient care or residential areas.

Staff should regularly conduct an inventory of stored equipment or furniture awaiting repairs and dispose of any surplus goods.

## MEDICATION MANAGEMENT

### Summary

Methods and policies for storage, dispensing and administration of oral and injectable drugs at Unit level will impact on planning and operation of that Unit but should as far as possible be standardised across the Facility or Network..

Refer to relevant legislation in each jurisdiction regarding the storage of drugs.

### Some Options

Options for dispensing include lockable medication trolleys, lockable bedside lockers, a Webster pack or other similar proprietary system.

Options for storage of drugs or medications include storage within a Clean Utility Room or a separate Medication Room with or without a dispensing window.

### Implications

The option chosen will affect the size and layout of the Clean Utility Room or Medication Room. It will determine the need for a dangerous drug cupboard, the need for sinks, benches, etc, plus storage for the equipment associated with distribution such as trolleys, baskets, etc.

Provision and location of dangerous drug cupboards/safes will need to be addressed.

### OPERATING HOURS:

#### Summary

The hours of operation of a Unit or Facility will affect access for patients, visitors and the general public and security requirements. They may also affect the placement of individual Units in relation to other Units and to the entry and exit points of the overall Facility.

Typically the need to access the Facility after hours will relate to access for visitors or patients attending the Emergency Unit or Birthing Unit or when called in for a sick or dying patient. It will also affect access required by staff, contractors and others.

Refer to Part C for further information.

#### Some Options

A Facility and/or Units may operate 24 hours a day, 7 days a week or at the other extreme be operational for only limited hours and days each week.

Other Facilities / Units may operate 5 days per week but require occasional after hours or weekend access.

Options for access include:

- staff access - 24 hours;
- public access 9am to 5pm;
- public access 9am to 5pm plus designated visiting hours;
- public access 9am to 9pm;
- public access 24 hrs;
- public access after hours by invitation/appointment; and
- public access after hours only in case of emergency.

Consideration should be given to locking down defined spaces out of hours to improve security and reduce energy demands associated with lighting and air-conditioning.

### Implications

A Unit that operates 24 hrs over 7 days has different security needs to a 9am to 5pm Unit. It needs to be placed appropriately and planned so that traffic to and from the Unit does not adversely disturb other Units or jeopardise security for the Facility overall.

Units with similar operating hours should be located within the same zone. Requirements for after hours access to a Unit are important in planning the placement of the Unit, access stairs and lifts, and in considering the security issues for that Unit, Units nearby and the Facility as a whole.

## **PASTORAL CARE**

### **Summary**

Pastoral care services may be offered to all patients and their families during the course of their hospital stay or outpatient attendance.

### **Some Options**

Services may be provided by specially employed health service staff, by visiting clergy or by other organisations.

### **Implications**

Provision of offices / Interview Rooms for Pastoral Care Staff

A quiet room may be provided for the use of bereaved relatives or friends in departments such as the Emergency Department and ICU and/or in the Main Entry.

A Chapel or Prayer Room may be provided to meet the spiritual needs of patients, relatives and friends.

The special needs of different cultural groups will need careful consideration.

## **PHARMACY**

Pharmacy is comprehensively addressed in HPU 560 - Pharmacy Unit in Part B of these Guidelines.

Note that liaison with local law enforcement agencies may be required / appropriate to ensure that the security of the Unit, the drugs contained therein and the safety of staff cannot be compromised.

## **SAFETY AND SECURITY:**

### **Summary**

Safety and security of staff, patients and visitors is of the highest priority and must be considered at every stage in the planning and design of Health Care Facilities.

Refer to Part C of these Guidelines for more details.

### **Some Options**

Specific requirements will vary depending on the type and location of the Facility.

### **Implications**

Failure to address these issues could lead to serious injury or death. This may also result in increased operating and Workers Compensation costs.

## **STERILISING SERVICES**

### **Summary**

The method of providing sterile supplies to the various Units in a Facility should be determined in conjunction with consideration of the Operational Policies for each of the Units where sterile supplies are used.

### Some Options

Sterile items may be processed off-site, in a centralised location in the Facility or at Unit level on an as needed basis. In areas that have a number of smaller Health Care Facilities, consideration should be given to the establishment of one central Sterilizing Unit with facilities in outlying facilities for reception and storage of sterilized items and processing and collection of used items.

### Implications

The procedures adopted for sterile supply will determine the need for space and equipment for sterilisation within the Facility or Unit. It will also determine the requirements for storage space for sterile supplies, and the need to provide an area for used (contaminated) instruments and equipment storage prior to return to the Sterilising Unit.

Quality assurance and availability are key issues in choosing the sterilising method.

### STORES AND SUPPLIES:

#### Summary

Policies and procedures for the ordering, receipt, central and dispersed storage and distribution of supplies need to be determined for the Unit or Facility.

Supplies may include pharmaceuticals and medical/surgical consumables, general consumable items such as stationery and products for use by cleaning staff e.g. chemicals, soaps, detergents, cleaning cloths, toilet paper, hand towels etc.

#### Some Options

The system used may depend on centralised stores management, be Unit based, or a combination of the two.

The ordering system to be used will determine delivery times and storage requirements.

Different types of goods may be supplied via different ordering systems.

#### Implications

The Central Store may be located either on the hospital campus or off-site.

Systems of delivery such as 'Just In Time' may impact on the need for storage space in Health Planning Units.

Responsibility for ordering and receipt, location of bulk stores, frequency and method of distribution will affect size and location of storage facilities and staffing.

Different types of supplies will require different types of storage facility e.g. shelves, cupboards, locked rooms, etc.

Different levels of security will also apply to the storage of different goods e.g. drugs and medications, although all supplies will need to be secured and managed to the extent that pilfering and wastage are prevented.

Provision of adequate storage for long weekends, etc, is important especially when a 'just in time' model is adopted.



### **VEHICLE ACCESS AND PARKING:**

#### **Summary**

Access for emergency, health service staff, general public and service vehicles should be clearly designated and separated, where possible, for a Unit and for the whole Facility. Arrangements will need to be made for parking for people with disabilities and drop-off spaces for ambulatory patients.

#### **Some Options**

Patients may be admitted to the Facility through a dedicated entrance or through the Main Entrance.

Separate staff entrances may be provided.

Parking may be centralised, controlled or distributed around a site.

Provision of secure staff parking is essential.

#### **Implications**

The number and locations of vehicular and pedestrian entrances will determine site planning and reception points and impact on security requirements.

### **WASTE MANAGEMENT**

#### **Summary**

Policies and procedures for the bagging, collection, storage and disposal of waste need to be determined.

Recycling issues, infection control, food and wet waste disposal, and environmental protection issues need to be considered.

Also refer to Part D of these Guidelines - Infection Prevention and Control.

#### **Some Options**

Policies need to be developed to determine how waste is sorted and removed, the frequency of removal, the quantity, size and number of waste holding and transport containers and who has responsibility for waste collection.

#### **Implications**

These will impact on planning and management of the whole Facility as well as the Unit including size and distribution of waste holding areas at Unit level and in central bulk handling facilities, equipment requirements e.g. compactor, cardboard baler, on site treatment.

Turning circles of equipment to be used such as tug trolleys will determine space layouts including key dimensions.