

DHS Design Guidelines and Health Facilities Design Experience in Use – a DHS perspective



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Design Guidelines for Hospitals and Day Procedure Centres (DGHDPC)- Experience in Use - a DHS perspective

1. Purpose
2. Scope/Applicability
3. AIP Assessments
 - Processes/Submissions Private Sector
4. Implementation
 - Implementation Issues
 - Priority Compliance Areas
 - Gaps
 - Changing Models of Care

DGHDPC

- DGHDPCs launched in 1 April 2005 (548 pages)
 - 1987 Guidelines (27 Pages)
- Provide safe and amenable environment
 - Delivery of appropriate standards of care according to level of service
 - Patients, staff and visitors.
- Recognise the importance of Good Design
 - Indicative so allow for
 - Flexibility of use
 - Encourage User Input
 - Workflows
 - Innovation

Purpose

- Set benchmarked standards in health facility design
 - Space/area dimensions
 - Infection Control Compliance
 - National *Infection Control Guidelines 2004*
 - AS/NS 4187: 2003
 - Occupational Health and Safety
 - Worksafe Victoria legislation
 - Infrastructure and support requirements
 - Engineering Services
- Not retrospective but compliance expected to whole facility if work to 50% or more of the facility is planned/carried out over 3 years

Scope

- Apply equitably to Public /Private
 - Capital projects funded differently
 - Standards apply equitably across both sectors of the health system
 - Approval processes different
- Public
 - Projects usually large and whole of hospital (Greenfield)
 - RWH relocation
 - Austin redevelopment
 - RCH
 - Limited to Maximum Requirements in relation to space
- Private
 - Brownfield redevelopments
 - Upgrades and redevelopments
 - Minimum requirements to achieve standards

Scope

- Five Main Parts
 - Part A: Instructions for Use
 - **Part B: Health Facility and Briefing Planning**
 - Part C: Access Mobility and OH&S
 - Part D: Infection Control
 - Part E: Building Services and Environmental Design
- Additional
 - Standard Components Room Data Sheets
 - Mandatory and Optional requirements
 - Standard Components Room Layout Sheets
 - Indicative layouts
 - Functional Relationships Diagrams (indicative only)

Part B- Health Facility and Briefing Planning

- **Construction Standards**
- **Almost 50 Specific Health Planning Units (HPU)**
 - Operating Suites
 - Obstetric Units
 - Psychiatric Facilities
- **Schedules of Accommodation**
 - Standard v Non Standards Components
 - Generic v Specific
 - Mandatory v Optional requirements

Approval In Principle Process

- **Health Services Act 1988 Part 4**
 - **Application for Approval In Principle**
 - All new facilities
 - Any alterations or extensions to an existing facility
 - **Variation of Approval in Principle**
 - Proposed change to the approved AIP design
 - Issues with compliance/conditions upon commencement
 - Delays with Certificate to expire prior to completion
 - Transfer of Certificate to another person (company)

Approval In Principle Process

- **157 Health Services Establishments:**
 - 70 Private Hospitals
 - 78 Day Procedures Centres
 - 9 Bush Nursing Hospitals
- **Multiple projects assessed and approved per year**
 - 174 projects submitted since the 1 April 2005
 - 68 in last 12 months
 - Variable size and scope

Approval in Principle Process

- **Initial meeting:**
 - Discuss concept plans, workflows, layouts, equipment etc
 - Ensure “good fit” with services and beds to be delivered
- **Assessment under Section 70, Health Services Act 1988:**
 - Suitability of applicant
 - Suitability of location and premises
 - Suitability of design and construction with respect to:
 - Complexity of services
 - Support services required
 - Integration of existing building with new areas

Approval In Principle

- **AIP Submission**
 - Application - Schedule 1,
 - Proposed proprietor is the applicant
 - Invoice to applicant proprietor (or delegate)
 - Description of project
 - 2 scale sets of A1/A0 and A3 drawings for formal architectural review and pdfs
 - **Schedule of Accommodation**
 - Building Surveyors report
 - Town planning and Building Permits as applicable

Schedule of Accommodation

- **Simple Spreadsheet**
- **Include:**
 - Standard Components required
 - Standard Components proposed
 - Size/volume Variance
 - Per component not aggregated
 - Reason for Variance

Approval In Principle Processes

- **Assessment**
 - Formal external review for compliance with DGHDPC
 - Full review including working drawings: mechanical, electrical, hydraulic, nurse call etc.
 - Feedback on design issues by Department of Human Services Architect, 3 to 4 weeks
 - Review report/Approval
 - Apply 80:20 rule

Approval In Principle

- Certificate issued
- Details:
 - Applicant (proprietor)
 - Address of facility
 - Scope of works and impact on beds and services
 - Approved plans (drawing numbers)
 - Date of Issue
 - Date of Expiry
 - **Schedule of Conditions of Approval**
 - Mandatory specific and generic

Approval In Principle Process

- **Construction**
- **Departmental Inspection**
 - Senior Nurse Advisor
 - Building Inspector
- **Certificate of Occupancy**
- **Certificates of Compliance**
 - Electrical and Body protection
 - Mechanical and Hydraulic
 - Nurse call
 - Glazing
- **Approval To Occupy**

Implementation Issues

- Compliance issues in Brownfield sites
 - Fixed foot prints,
 - Rooms already non compliant, issues with
 - Addition of ensuite size
 - Addition of hand basins (single and 2 bed rooms)
 - Discrepancies in DGHDPC
 - Dialogue v indicative layouts
 - Apply flexibility, commonsense and rational approach
 - 80:20 rule!

Single Bed Room



Implementation Issues

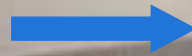
- Nurse call systems not compliant
 - Functionality
 - Location/height etc
- Mandatory v Optional requirements
- Changes in practice
 - Pan flusher, Maceraters
 - Slop hoppers
 - Sinks in clean utility/medication rooms but no hand basins
 - Splash issues/Perspex protectors

Full dirty utility



Medication room/clean utility

Optional



Implementation Issues

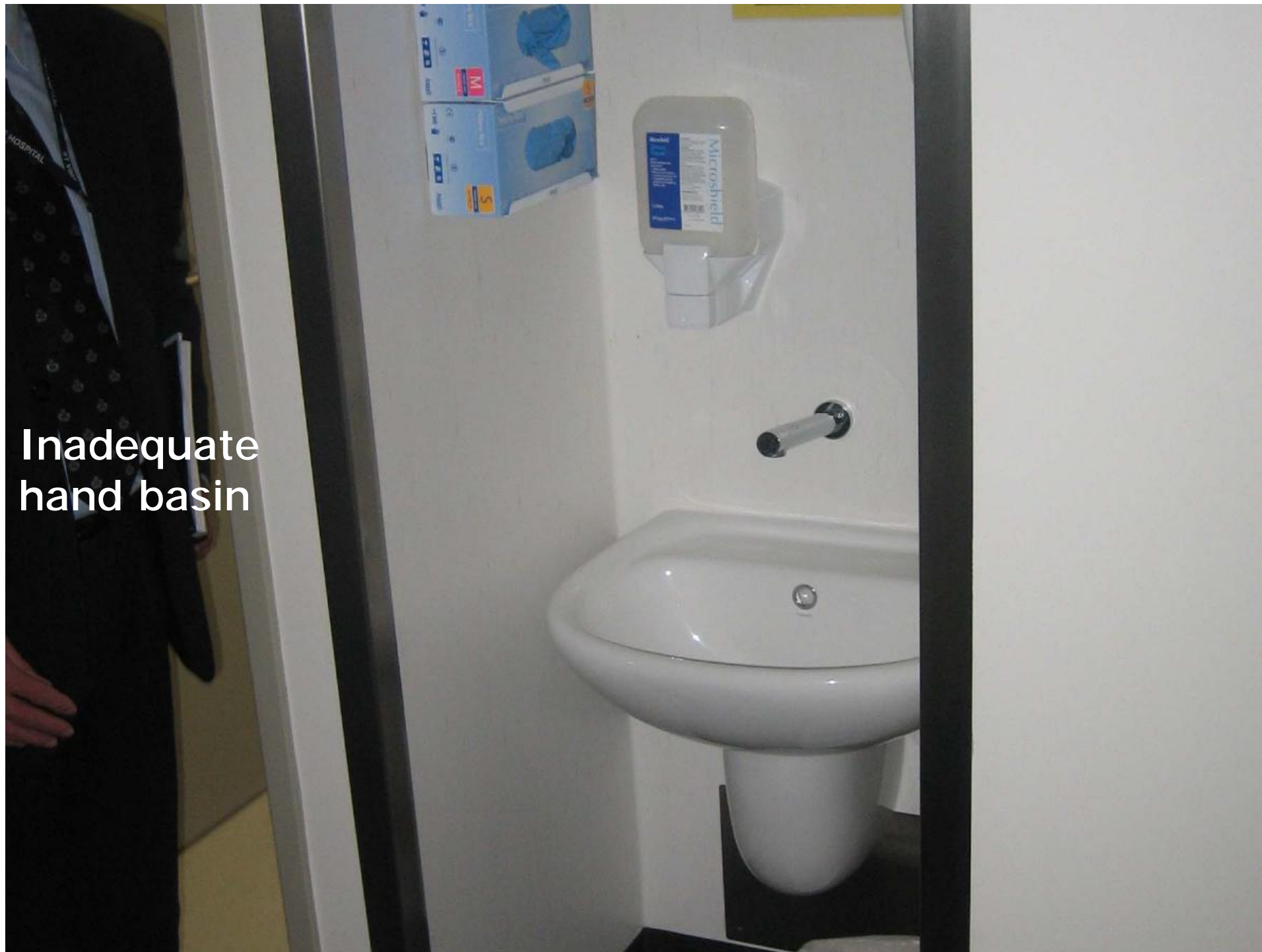
- **Architectural/Building design features**
 - Overhead design features, e.g. ledges in operating theatres
 - Non functional hand basins
 - Sliding door and cupboards inaccessible for cleaning dust traps etc
- **False economy compromising functionality**
 - Ensuites too small
 - Overlarge areas compromising other working areas, utilities twice the size
 - No Building Permit

Implementation Issues

– Hand basins

- Inappropriate design and size: might look nice but aren't functional
- Locations, numbers: one per room, one per multiple bed rooms
- No more than 10-12 metres distance to travel
- Hands free taps
- Overflow outlets

Inadequate
hand basin



Priority Compliances - DGHDP

- Compliance with the text of the Guidelines (where discrepancies exist) , e.g. dimension around a bed
- Floor areas as shown in the schedule of accommodation
- Heights and dimensions where shown
- Any Clean/ Dirty separations shown or implied
- Accessibility to and around various objects as shown or implied
- Relative location and empirical dimensions of:
 - Hand rails and Grab rails
 - Call points, Power, Light Switch, Data and Gas outlets
 - Bed Screens
 - Sanitary Fixtures

Priority areas of Compliance

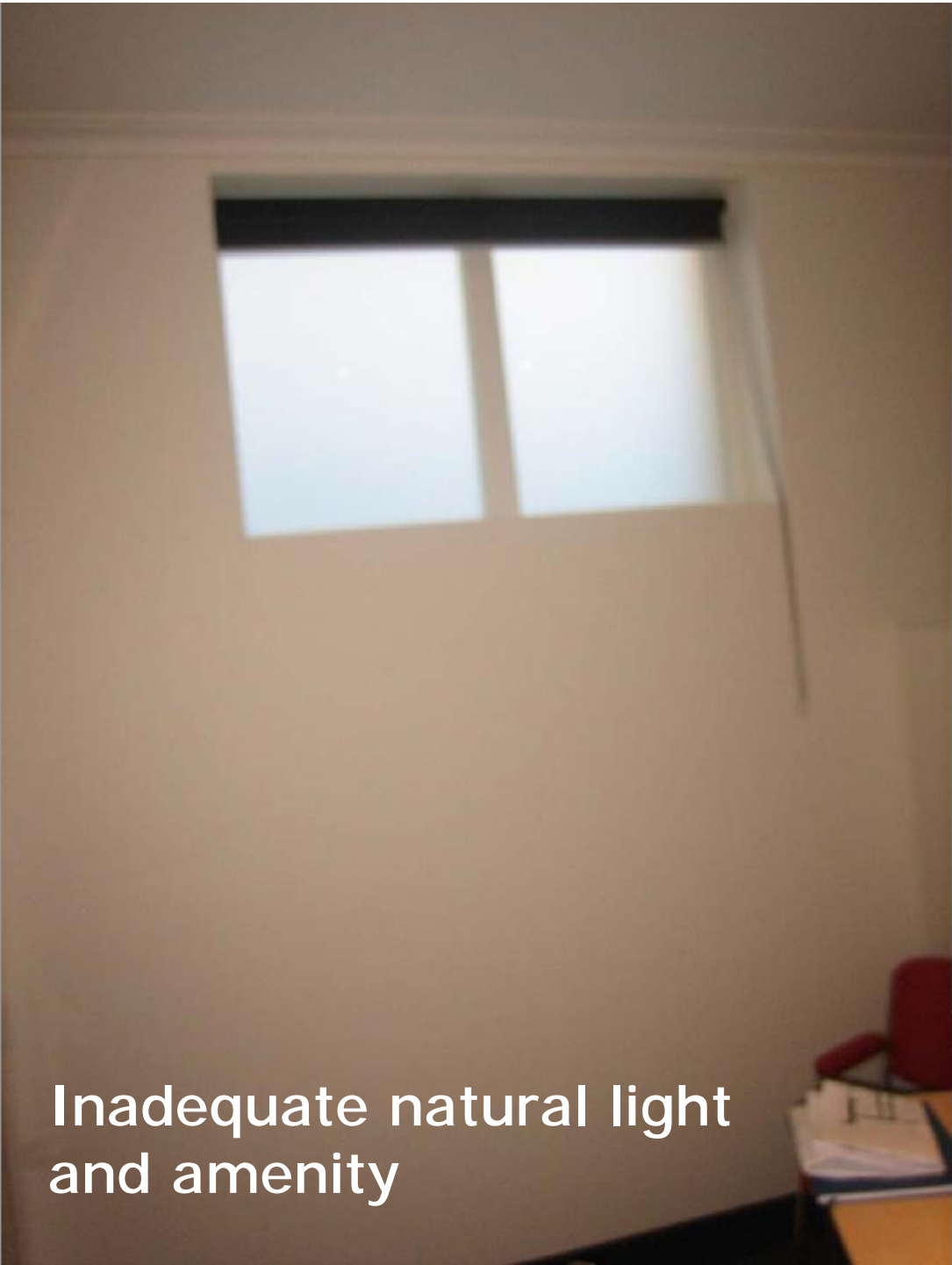
Regulatory Compliance

– BCA

- Natural Light, windows 10%
- Emergency Egress
- Disabled access

– Occupational Health and Safety Compliance

- Bed rooms
 - Size
 - Circulation space,
 - Areas across the bed head
- Ensuites

A photograph of an interior room, likely an office or classroom. The wall is a light beige color. A window with a dark frame is positioned high on the wall, showing a bright, overcast sky. In the bottom right corner, a portion of a red office chair and a desk with papers is visible. The image is framed by a grey border.

**Inadequate natural light
and amenity**

Adequate light



Priority compliance areas

- **Patient Safety/Privacy**
 - Patient bay, room and ensuite sizes
 - 9sqm, 15, 4.5/5
 - Patient privacy screens also delineate the area
 - Circulation space
 - May expand/extend e.g. endoscopy chairs
 - Corridor and Door widths, Hand rails
 - Nurse call systems
 - AS 3811—1998
 - BCA
 - Heights, ensuites
 - Can be wireless but not portable
 - Certificate of compliance



Ensure adequate area around
head of bed and circulation space
Hand Basin required

Priority compliance areas

- **Infection Control Compliance**
 - Air flows and air conditioning
 - Clean to dirty flows/pressures
 - Procedural Room/Theatres
 - Adequate Utility areas including waste removal/ disposal
 - Procedural Clean Up areas
 - Washable Surfaces
 - Floors, vinyl under basins, etc
 - Bulkheads in clinical areas
 - Sufficient storage requirements
 - Minimum distance between centre of beds/trolleys i.e.. 2400

Clean up /
Sterilising and
Sterile Store
Area Interface





Identified Issues/Gaps

- **Issues**
 - Inadequate incomplete SoA
 - Discrepancies in the DGHDPC
 - Stage 3 recovery chairs
 - Ceiling Heights
 - Theatres
 - Patient lounges
- **Gaps HPU's**
 - Chemotherapy Units
 - Discharge Lounge

Changing Models of care -Impacts

- **More ambulatory**
 - **BCA classifications 9A v 5**
 - **Day psychiatric facilities**
 - **23 Hour facilities**
 - **Medihotels**
 - **Medical Centres**

Useful Addresses

- **Application for Approval in Principle**
 - www.health.vic.gov.au/privatehospitals/resources

- **Design Guidelines for Hospitals and Day Procedure Centres**
 - www.healthdesign.com.au/vic.dghdp