DHS Design Guidelines for Hospitals and Day Procedure Centres

Experience in Use – A Consultants Perspective

Melina Thomas Director, STH
There are very experienced consultants using the guidelines with a knowledge of healthcare facilities 

eg, Silver Thomas Hanley – 30 years of health

These consultants can negotiate their way through the extensive guidelines

There are less experienced architects using the guidelines with a limited knowledge of healthcare

These consultants may take the guidelines literally without reading the fine print...
When commissioned as architects for a healthcare facility, we have to meet the following:

- Address Model of Care
- Functionality
- Expectations
- Value for Money
- Flexibility
- Image
- Wayfinding
- Evidence Based Design
- Recurrent Costs
- User Group signoff and acceptance
- DHS signoff and acceptance
- Conform to standards and legislations
- AND BE INNOVATIVE!!

“think beyond tomorrow…”
• Town Planning

• Building Code of Australia

• Disability Discrimination Act

• Australasian Health Guidelines

• Occupational Health and Safety Guidelines

• Worksafe “Designing Workplaces for Safer Handling…”

• Victorian Infection Control Guidelines

• DHS Victoria - Design Guidelines for Hospitals and Day Procedure Centres
• Good “base” document for all architects, exclusive of their experience
• Schedules for all departments grouped under hospital “level”
• One guideline used for all new developments
• Good for a base reference in usergroup meetings to show users the minimum requirements
• Should create a base standard across all new hospitals
• If users/hospital wish to deviate from the guidelines, written approval required from DHS (and hence this does not occur as often)
- Reliant on architectural firm’s knowledge, “generic” data base and experience
- Wide range of room sizes and room layouts
- Reference documents used included:
  - USA and NHS Guidelines
  - NSW “Hosplan” 1977 and NSW Health Facility Guidelines 1992
  - Vic 120 bed Hospital Guidelines
- No base document to commence each phase of work
- No specifics regarding fitout or gases etc – open to interpretation and individual users requests
Daunting with excessive information and cross referencing between documents

Conflicts occur between different sections

They may conflict with standards and other guidelines

The use of “shall” as a mandatory term is not clearly defined

Part A – “Mandatory – all clauses by default are mandatory...if the word mandatory does not appear in a clause, it does not indicate that the clause is optional...”

The use of “should” is often confusing

Part A – “Should – the item requires attention and a suitable solution such as the one provided. Not mandatory...”should” is not as strong as “shall”
● It is by its nature “generic” and therefore major specialties are often not included.

● An inexperienced architect can use room data layouts as definitive when there could be OH & S issues.

● Difficult to comply with in refurbishment projects. Eg, in private sector, due to new sizes for day surgery, NICU, Day Chemotherapy, you can refurbish a larger area, and end up with less “beds” – hence projects are being packaged into under 50% portions.

● A static document which is not keeping up with international trends, evidence based design, changes in Standards including infection control, and recent health facilities.
PART A - Introduction and Instructions for Use
PART B - Health Facility Briefing and Planning
PART C – Access, Mobility and OH & S
PART D – Infection Control
PART E – Building Services and Environmental Design
Standard Components – Room Data Sheets and Layouts
• “The documents provided are Guidelines. Users are asked to seek expert opinion on the important issue of Health Facility Design whilst considering these guidelines. Many of the concepts covered by these guidelines require a minimum level of knowledge of Health Facilities and Health Facility Design”

• “These Guidelines do not cover the operational policies of individual facilities due to the generic nature of them”

• “The authors of these Guidelines as well as those involved in checking and approval accept no responsibility for any harm or damage, monitory or otherwise caused by the use or misuse of these Guidelines”
• **Disclaimer:** These Guidelines do not reduce the obligation of the designers to comply with all Statutory and Legislative requirements. Refer to Part B "Construction Standards" for the Priority of Documents and further information on this subject.

• "**Nothing in these Guidelines implies** that compliance with them automatically results in compliance with other legislative or statutory requirements"
The following links contain information and links relevant to the subject of Design Guidelines for Hospitals and Day Procedure Centres. These links may be useful for further reading and research purposes. However, users should note that any guidelines found on these links may not be compatible with the new Victorian Guidelines for Hospitals and Day Procedure Centres (DGHDP).

- “NSW Health Guidelines
- Standards Australia
- AIA Guidelines for Design and Construction of Hospitals and HealthCare Facilities (USA)
- Department of Health – Policy and Guidance”
NOW CONFUSION and NERVOUSNESS SETS IN. . . .

Particularly if you;

- Have actually read Part A
- Have limited or no experience in healthcare
- Are a graduate architect instructed to use the guidelines by the director in charge
- Or are frustrated because you don’t know where to start
This is the main section of the guidelines that architects reference the most. It constitutes the following:

- General requirements
- Standard components and references to Room Data Sheets and Room Layouts
- Departments listing description of room, and schedules of accommodation
“The main aims of these guidelines is to:… establish the *minimum* acceptable standards for design and construction” page 6, Part A

However in reality, the guidelines are often being used by DHS as a *maximum* not a *minimum*.

example SCHEDULES OF ACCOMMODATION
30% single rooms – many current projects have 60% to 80%

No airlocks for isolation rooms – negative pressure

1 bedroom special is no longer ‘optional’ with numbers of bariatric patients, etc

Lack of clarity of which hospital falls under which “level”

No bays for PPE, pneumatic tube
Circulation factor with recommended corridor sizes is closer to 35-38%

Bathroom size doesn’t allow for patient lifter access nor assisted or disabled use

End result is a larger area than the guidelines

Schedules by nature change with trends and model of care

The schedules should not be used as a maximum which is currently occurring
Operating Rooms

Size

- AusHFG recommend 42m²/52m²
- DHS Vic recommend 42m²/50m²
- NHS recommend 55m²
- USA recommend 55m²/60m²
- Canada recommend 48m²/55m²/60m²
- Current projects range from 50-60m²
The Guidelines state you must do the following:

- Compliance with the text of these Guidelines
- Minimum floor areas as shown in the schedule of accommodation
- Additional 2 M2 added for each additional door above the minimum required number
- Heights and dimensions where shown
- Any Clean/Dirty separations shown or implied
- Accessibility to and around various objects as shown or implied
Beds are getting larger
Handbasins are increasing in depth
Gases preferred closest to room entry
How does a staff member fit between handbasin and bed?

865 sill too high for view from bed.
750 max ht instead
How does a staff member fit between handbasin and bed?

3050mm
This is the first page of the room data sheets.

An experienced architect knows this won’t work.

An inexperienced architect does not.

Who gets blamed over any OH & S issues?

The architect ….
This bedroom works better
- wider space between handbasin and bed
- wider bedhead

But why are these dimensions different?
Consistency and critical dimensions required across all bedrooms

PLAN

950mm
900 sill here

3400mm

ELEVATION 2
One Bedroom Layout - Alternative Proposal
Vanity end is exposed to shower

Maintenance issues

OH & S issues

Solution – add a wall or angle basin
Why have corrective taps when three grabrails can be used for self harm??

If you conform to this, you can expose yourself to litigation!
Area in box conflicts with actual area of 2.5m²

Width between handbasin and wall is 630mm (using 450mm basin)

Large staff members have been stuck! Eg Prince Charles Hospital

After our POE, we recommend 1350mm c/l of walls
A reminder again:

The Guidelines state you must do the following:

• Compliance with the text of these Guidelines
• Minimum floor areas as shown in the schedule of accommodation
• Additional 2 M2 added for each additional door above the minimum required number
• Heights and dimensions where shown
• Any Clean/Dirty separations shown or implied
• Accessibility to and around various objects as shown or implied
Issues:

- **Additional 2 M2 added for each additional door above the minimum required number**
  - Area is fixed upon completion of Schematics
  - Extra doors get added in Design Development
  - This extra 2m2 is not factored into any schedule
  - It is generally impossible to meet this requirement

- **Heights and dimensions where shown**
  - What is mandatory and what is typical?
  - If you built to some of the layouts you will get blamed
  - If a critical dimension it should be stated
  - If not, then flexibility should be allowed for and commonsense.
DHS may quote “it is only a guideline”

However clients can use this against the architect by questioning why each room is not the exact area, or drawn to the exact dimensions as shown.

Eg **BATHURST HOSPITAL** - NSW guidelines

hospital questioned why they didn’t have every room in a schedule for a particular “level” hospital

hospital questioned why rooms drawn at different sizes/dimensions to guidelines

In current NSW projects, STH have had to justify every dimension and why they differ from the room layouts, even when the area is correct
• Compliance checklist is good (used inhouse)

• Some recommendations questionable – eg no observation glass recommended in seclusion room doors

• Acoustics - the STC ratings are not often possible, eg STC50 in corridors. (and not required)

• Does provide an excellent reference for floor finish types (specifically slip ratings), corridor widths and ergonomics (eg bench heights and depths)
Handbasin list is excellent, specifying use of scrub, clinical and non-clinical basins and locations.

• **Recommendations**

  • depth and minimum dimensions for clinical handbasins for standardisation
  
  • option of alcohol rub instead of handbasins in certain zones, reflecting hospital practices
  
  • Policy on overflows – none listed, yet many hospitals prefer no overflows

Isolation Rooms – some hospitals are now preferring to co-hort isolation rooms on one ward, rather than having an individual one in each ward.
• The intent is good
• There are many benefits
  HOWEVER

• The Guidelines are not a static document therefore need constant updating
• They should not be used as a maximum but as a minimum
• There should be more flexibility for refurbishment projects
• There should be a simpler and more specific document
• Inconsistencies and errors should be corrected
• It should be updated to recognise changes and compliance with new Standards
• DHS should update it with the comments issued by all healthcare architects on review of the draft in 2005 – many of these were not incorporated in final issue