1.0 Introduction

1.1 Structure of these Guidelines

Part B of the HAAD Guidelines covers the subject of Health Facility Design and the factors which influence the outcome. Health Facility Design requires knowledge, skill and experience. These guidelines alone may not be sufficient to ensure good design, however, using these guidelines, a reasonably skilled designer should be able to focus on the required functionality quickly and deliver a product which meets the minimum HAAD requirements.

The administrative requirements for health facility applications have been covered in Part A of the HAAD Guidelines. This part focuses on the Architectural and Health Planning Aspects. This part may include aspects of service health service provision and facility design which are not part of the HAAD approval but required as part of the process of delivering a competent health facility.

Part C addresses issues related to Access, Mobility and Occupational Health and Safety requirements.

Part D details the Infection Control requirements of healthy facilities.

Part E will focus on the Engineering aspects.

All parts must be taken into consideration in the design of health facilities.

1.2 Levels of Recommendation

1.2.1 Mandatory Requirements
Within these Guidelines, all paragraphs by default are mandatory. In situations where the text has the potential for misunderstanding, the note “mandatory” may be used to clarify any aspect which is absolutely required without re-interpretation. Even if the word “Mandatory” does not appear in the text, it does not indicate that the paragraph is optional.

This principle also applies to Schedules of Accommodation, Room Data Sheets and Room Layout Sheets. Items listed are required and only optional if indicated.

1.2.2 Recommended Requirements
On some occasions a standard is mandatory but a higher standard is recommended. The intention is to guide designers who wish to voluntarily upgrade the facility to a higher standard and wish to know what the higher standard is.

1.2.3 Optional Requirements
The text, Schedules of Accommodation and Room Data Sheets will indicate “Optional” for all items that are not mandatory requirements.
1.3 **Health planning**

Health service provision is determined by the discipline known as Health Planning. There are two branches to this discipline; Health Service Planning and Health Facility Planning.

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**1.3.1 Health service planning**

This discipline relates to the research, analysis and calculation of demand and supply for a given population catchment. Every competent proposal for a health service starts with a Service Plan.

**Demand**

A Health Service Planner uses various statistical tools as well as benchmarks and localised information to determine the raw demand. This may be represented by Occasions of Service (OOS), Average Length of Stay (ALS), Presentations Per Annum (PPA) etc. The service planner will consider inflows of patients from other catchment areas as well as outflows to other catchment areas. The calculations will include level of self-sufficiency desired or anticipated.

The demand is typically calculated for a period of time into the future known as the Time Horizon of the Study. This may be 10 to 20 years into the future. The starting point will be known as the Base Point or Base Year. The characteristics of the population in terms of age, gender and predisposition to various diseases and socio-economic class have the greatest influence on the demand of each population catchment.
A Service Planner finally converts raw demand into facility units known as Key Planning Units (KPU’s). KPU’s may vary greatly depending on the nature of the facility. They include:

- Bed numbers of a variety of types
- Operating Room Numbers
- Birthing Room Numbers
- Emergency Treatment Cubicles
- Consultation Rooms
- Diagnostic modes of a variety of types

These KPU’s are later used by Health Facility Planners to prepare a full brief for the proposed facilities.

**SUPPLY**

This refers to the current supply of health facilities and the service they provide to the same population catchment. This may or may not meet the needs of that population catchment now or in the future.

**SERVICE GAP**

The difference between the Demand and Supply is the Service Gap which needs to be met by the provision of health facilities. The process of determining this gap and proposing solutions for meeting it is described as:

- Needs Analysis,
- Feasibility Study; or
- Business Case

A proposal for a facility, therefore, should not commence with a block of land and design. Health Facilities are too important to be treated purely as a real-estate development. A competent Service Plan resulting in a Needs Analysis, Feasibility Study or Business Case must be at the core of any proposal. At this time, HAAD does not require the submission of these documents.

### 1.3.2 Health Facility Planning

**GUIDELINES**

Once the Service GAP is known, this is the discipline that aims to design facilities and meet the health service gap. The outcome of this discipline is design and specifications for the construction of facilities or refurbishment and expansion of existing ones. It is essential that any hospital design is based on a set of guidelines accepted and endorsed by health professionals, the design community and more importantly the local governing bodies. Design guidelines are different from operational standards that are enforced and obligatory. Design guidelines are meant to steer professionals like architects, interior designers, facility planners and project managers towards an acceptable outcome in terms of a successful health facility design.

**BRIEF**

Brief can be defined as a comprehensive written document for a design project (ie a hospital) developed by the client representing his/her business needs for the design and the designer. The document is focussed on desired results for and not necessarily the aesthetics or the logistics. The design brief should contain a Problem statement if relevant, goals for the client, the desired results and solution analysis if required. The design brief is based on the combination of Service needs (ie GAP) and/or Guidelines/Standards for the design. More importantly, the brief acts as Quality Check and establishes a minimum level of expectation. The actual design may have to undergo a series of approvals from various local regulatory authorities before being formally ‘Approved’ as an acceptable design.