

The Role of Design Guidelines for Accident and Emergency Facilities in South Africa 2011

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Abstract

Demand for healthcare services in South Africa has increased tremendously since the end of apartheid. Owing to a backlog in healthcare service delivery, it is important that a review of current *Design Guidelines* (DG's) takes place in order to improve the level of healthcare facilities provision in South Africa. Current DG's date to the apartheid era and no review has taken place since this period. In this regard the continued use of current DG in a democratic environment constrains provision of healthcare services delivery, in particular to the majority of the population. It is important, therefore, that a review of DG takes place in order to respond to the needs of a new society in which all citizens have equal access to adequate healthcare facilities essential to the achievement of equitable, efficient and responsive healthcare services delivery. This study focuses on DG for Accident and Emergency Facilities (DGAEF) and specifically case studies of the A & E facilities: at Chris Hani Baragwanath Hospital (CHBH) located in Soweto, and at Pretoria Academic Hospital located in Pretoria, South Africa. A comparative study of DG's was undertaken in developed and developing countries. This was done using <Planetree nursing philosophy> principles that focus on patient-centred environments.

The theoretical research focused on DG's for A & E facilities and its key dimensions and sub-dimensions. While the empirical research conducted between 2006 and 2007 was undertaken through the following processes: Questionnaires, interviews, floor plan analysis, participant observation and explored in Gauteng province, South Africa as the context of the study, targeting consultants, caregivers, government officials, patients and A & E facilities. Owing to geographical and time limitations, the study was conducted only within Gauteng province. Empirical findings were recorded and analysis undertaken for various A & E facilities with emphasis on different zones, like: Zone A – entrance, receptions, and waiting areas; Zone B: examination and treatment areas; Zone C – wards and in-patient areas; and Zone D: ancillary and support areas. The information gathered was analysed using SPSS software, space syntax analysis, hierarchical task analysis and link analysis, content analysis, Excel software and SWOT analysis.

Findings included inadequate policy issues on review of design guidelines, prolonged timeframes for project implementation, quality issues, lack of integration of the brief, design, construction and post-occupancy evaluation (POE). In addition, findings from this investigation show clearly the need to introduce criteria for the definition and development of design quality indicators (DQI's) and key performance indicators (KPI's), in the general and specific design requirements in the DGAEF used for space design and provision, functional suitability and spatial relationships. In fact, socially responsible DG's for healthcare facilities development should be based on Planetree principles, and should emphasise the following: improved project communication approaches; understanding of value systems; participatory design processes; constant use and update of the information systems through technology innovation; institutional transformation based on societal change; standardisation of the overall project development process from briefing through POE. The key findings and recommendations of this research to government and policy makers is that the statutory application of the current DGAEF should be discontinued. The current DGAEF reviewed based on whole-life-cycle costs in order to improve A & E facilities physical environment in South Africa. Therefore, the practical implications of this research and recommendations for future research are suggested, including establishing a healthcare facility project development council and establishing a research institute for healthcare facility design.