

EVIDENCE-BASED APPROACHES TO MEDICAL CITY MASTER PLANNING IN A FRONTIER MARKET: A CASE PROJECT IN AKWA IBOM, NIGERIA

Chanam Lee

Texas A&M University

Introduction

This presentation is to explore how existing theories and empirical evidence can be used guide the development of a medical city master plan in a frontier market, using a project case in Akwa Ibom, Nigeria.

Description

While the Niger Delta region is known for its rich natural and ecological resources, its residents have suffered from inadequate access to healthcare. The region's infant mortality rate is among the highest in the world. According to World Bank, life expectancy of Nigerians as of 2012 was only about 52 years, compared to 79 for Americans and 75 for Chinese. Large-scale interventions like the implementation of a comprehensive medical city can respond to the urgent need to improve health and health care among this vulnerable segment of the population.

Methods

A qualitative approach was used to collect inductive data from several sources to cover all critical elements needed for developing a comprehensive medical city in a frontier market. Data originated from: (1) case studies of ten most relevant examples, (2) literature reviews and research on nine most relevant substantive topics, (3) in-depth interviews with the clients and stakeholders of health and human developments in Nigeria and the US, and (4) field observations to gather all necessary physical and socio-cultural data from the project site. The evidence-based design/planning approach offered a valuable framework to guide the master-planning decision-making process.

Results

The data gathered were synthesized and analyzed to extract most salient elements of medical city master planning, which were then categorized into 'people,' 'economy,' and 'environment.' This led to the development of three overarching guiding principles for the master planning: (1) healthy living for all, (2) economic and cultural developments, and (3) sustainable and low-impact development. In addition, eleven master plan objectives including active living, safety/security, food systems planning, economic development and education, etc., and 60 performance measures were derived from the data gathered.

The ten-month master planning process involving multidisciplinary team and advisor members resulted in a comprehensive plan that will serve as the basis for implementing the medical city within the next three years. The final Thompson & Grace Medical City master plan was developed to create a sustainable and self-contained mixed use community anchored by a world-class teaching hospital on a 100-acre green field property. It provides a full range of healthcare services, including curative and preventive cares, and traditional and alternative cares, to residents, employers and visitor. It proposed optimal spatial arrangements of diverse land uses including an urban center, hotel, conference center, diverse residential communities, artisan village, entertainment center, elementary school, and industrial park. The City's land uses are supported by multi-modal transportation systems and extensive green infrastructure, while responding to the local history, culture and landscape. It was prepared to serve as a model for future healthcare development in Africa and other frontier markets.

Conclusion

This project offers theoretical and practical insights into the design, planning, and implementation processes for developing healthcare projects and communities in a frontier market.