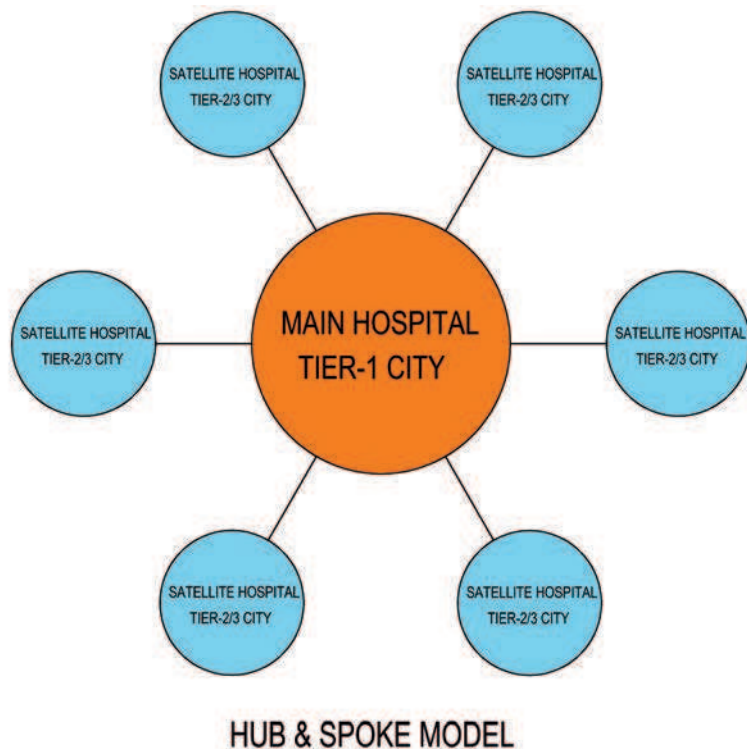


Emerging And Evolving Trends In Healthcare Design

Text by: Shamit Manchanda

The healthcare sector in India is poised for sustained growth over the next 20 years. It is on a high-growth trajectory path, being pushed by domestic growth, public awareness and growing world interest in India's delivery capabilities. The total industry size is expected to touch USD 280 billion by 2020. This is now being further boosted by "Ayushman Bharat", world's largest National Healthcare Program. The National Health Protection Scheme is targeted at 100 million poor and vulnerable families. As part of this "Ayushman Bharat" programme, the government will also launch 150,000 health and wellness centres, besides setting up new hospitals and upgrading the old ones. This will also see an increased number of private hospitals being built and upgraded to cater to this demand. The numbers are huge.

Corporate hospital chains have been immensely successful in the last 15 years in providing high-quality healthcare services to an educated and affluent urban population as well as the rising aspirations of semi urban and rural population. Though revenue is a key goal for these hospitals, emulating Western standards and ensuring the best outcomes for patients is very important in order for them to attract and retain customers. To remain competitive in the market,



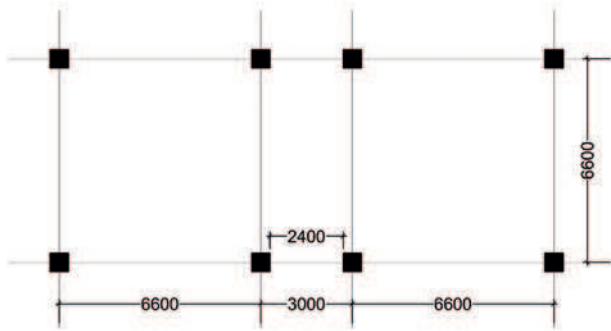
hospitals are opting for external accreditation through international organisations such as JCI or India's NABH. Accreditation is also seen as an important process for improving patient safety and quality of care provided to patients. With medical tourism being an important driver, many private hospitals aspire to provide high-quality built environments similar to those found in U.S. and European hospitals.

The push now is going to be in Tier 2 and Tier 3 towns where these facilities have been broadly missing. Many corporate hospital chains are moving into these smaller towns either by constructing new hospitals on their

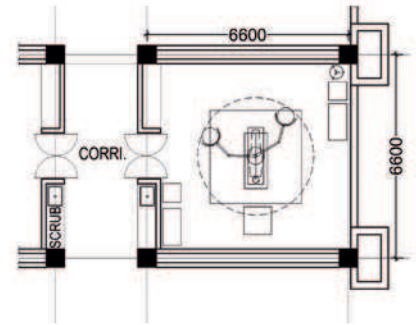
own but mostly by taking over existing hospitals by adopting a Hub and Spoke model to expand their presence.

HEALTHCARE DESIGN

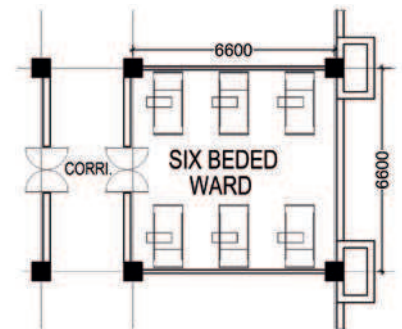
The art and science of designing a hospital is a very complex affair. Beyond complex technical requirements that modern medicine demands and rigid functional relationships between different medical departments, the designer has to cope with a host of more subjective issues like the anxiety of the patient, the stressful work environment of the staff and the need to build a sustainable and healing building.



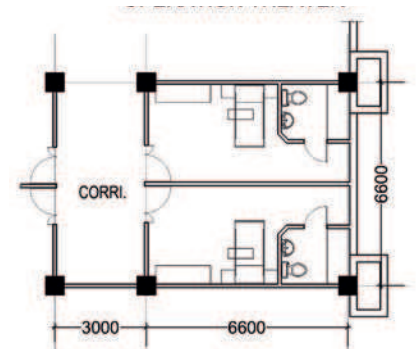
**COMMON STRUCTURAL GRID
PUT TO DIFFERENT USES**



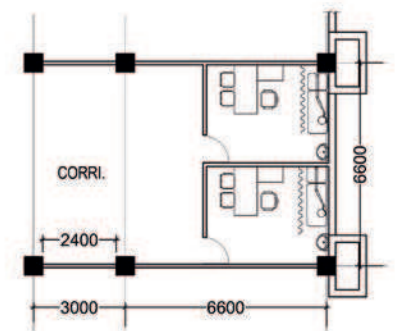
OPERATION THEATER



SIX BEDED WARD



SINGLE BEDED WARD



CONSULTANT ROOM

TRENDS

Bed Mix: The bed-type mix in private vs government hospitals are on two ends. In government hospitals, the emphasis has been to provide basic facilities to the poorer sections of society and has primarily focused on large multi-bed wards (90% of total bed count). On the other hand, private hospitals provide a combination of multi-bed wards (15-20% total bed count), single occupancy rooms (around 75%), and luxury single rooms for high-paying customers (around 5%)

Shift towards Ambulatory/Day Care: With an increasing focus on wellness and short stays for noncritical procedures, ambulatory care centres are coming into prominence. These are designed to be one-stop shops that provide a range of diagnostic and patient care services.

New Technology: While there is a growing focus on patient-centric care, many new private hospitals are investing heavily in new technology and equipment. Today, hospitals are being planned with Hybrid OT and Brain Suites – a combination of the Imaging modalities being brought right inside the Operation Theatres. Hospitals are turning into Smart Hospitals with e-connectivity built into almost all medical equipment to patient rooms to Electronic Medical records etc. All building services are connected via Intelligent Building Management systems to bring in optimum utilisation and efficiency. Use of Tele-medicine is also on the rise.

Green and Sustainable: There is a strong push toward sustainability in all public projects in India, including healthcare projects. The GRIHA assessment is mandatory for public healthcare projects, and they are being designed with the goal of obtaining a minimum of a three-star rating. Some of the design features being considered for these projects include rain water harvesting, use of high-efficiency light sources, utilisation of natural light, use of low VOC materials, waste water recycling, energy recycling and use of renewable sources of energy. Though not mandated but the private hospitals also see the long-term advantage of going green and sustainable.

Design for flexibility and expandability: Due to the complex nature of hospital organisation and diverse factors such as operations and functions, alterations and expansion of buildings are varied and frequent. Buildings should be adaptable to the changing requirements. None of the varied elements are static for as technology develops, medical understanding progresses so do social demand and expectations. Therefore, it becomes imperative that our structural grid is so selected that it can be put to various uses. ☒

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