

# HEALTHCARE RADIUS

Aligning business and healthcare in India

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## HEALTHCARE GOES MODULAR

RARELY CONSIDERED SUITABLE FOR HOSPITALS A DECADE AGO,  
MODULAR CONSTRUCTION IS GAINING POPULARITY TODAY.  
A FOCUS ON THIS NEW INFRASTRUCTURE TREND IN HEALTHCARE.





## Opening a hospital at a remote location: A quick guide

There has been a newfound interest among investors and entrepreneurs to open hospital facilities in tier-2 and tier-3 cities. Here is a handy checklist to ensure such projects sail smoothly

BY MANJUSHA ANIL

In the aftermath of the Covid-19 pandemic, there has been a burgeoning demand for better healthcare infrastructure and services in tier-2 and tier-3 Indian cities. Investors and entrepreneurs from diverse sectors are making a beeline to open hospitals in these regions. Let's explore the best practices that need to be employed by those eyeing remote locations to start a new hospital venture or to open a new healthcare facility.

**Primary location selection considerations**  
Irrespective of the regional zone, enterprises looking forward to setting up a hospital at a remote location anywhere in India need to consider a few critical considerations. Failing to do this could affect not only the hospital's profitability but also its sustainability in the longer run.

Primarily, the selected location should

be able to save cost, optimize scaling and improve facility utilization in the long term, according to Sneha Gurjar, Director, CEM Engineers, one of India's foremost infrastructure development companies. She enlists a few Must DOs for hospital location hunters to ensure all these.

"A comprehensive study should be conducted on the location's population deemed to benefit from a hospital development, in terms of the population's density, education level, and economic condition. Another crucial aspect is the location's accessibility and scope for infrastructural expansion in the future, complemented by the availability of service infrastructure, and whether it adequately addresses environmental, economic, and social factors. An equal weightage should be given to the improved quality of care, measured by clinical practices or management practices that reduce long waiting

times, cleanliness of premises, and provider-patient interactions," Sneha elaborates.

"We have also considered the existing players in the location concerning the specialties they offer. The focus should be on complementing the existing players' offerings and not competing against them by providing the same specialties that existing hospitals offer. We have to do further data crunching on the payer mix of the currently existing hospitals, including how many consumers pay in cash or avail of insurance facilities, and how many people avail of private and government insurance services," opines Dr Abhishek Pawar, Principal Consultant, Hosmac India, a leading provider of hospital planning & management consultancy services in India.

### Common project challenges

A new hospital construction project has three phases: planning, construction, and post-construction. All these phases come with their own set of challenges. According to Sneha of CEM Engineers, during the planning phase, appropriate medical technology, the hospital's strategic vision, technological advancements, and operational efficiency must be balanced to ensure a healthcare project's success.

The design has to adapt to evolving technology and healthcare standards. During this phase, the focus should be on 'patient-centeredness,' covering adequate space to accommodate the patient's family members and marked signs to navigate the hospital, among other things; 'safety,' encompassing vitals aspects that include proper ventilation and filtration and hand-washing facilities; and 'effectiveness' that calls for several features, like standardizing room layout, location of supplies and medical equipment, noise control and natural lighting, she explains.

During this stage, promoters should only appoint architects with experience in the healthcare sector. "Roping in architects without healthcare experience may save some



costs in the beginning. But then you end up demolishing and rebuilding the structure later, which can result in significant cost escalation," points out Dr Abhishek of Hosmac.

The construction phase relates to building a new hospital infrastructure and expanding and modernizing the existing facilities. Equipment planning regarding spatial and structural design, special loading requirements for zones with heavy equipment, avoiding wet zones stacking over expensive equipment, and slab recesses planned are some of the practical issues likely to be faced during the construction phase.

These are due to a lack of coordination between design, equipment planning, and Mechanical, Electrical, and Plumbing (MEP) services, which can result in core cuts, dismantling of the affected structure, project time and cost overruns, and equipment not performing to its capacity, felt Sneha. If the building is not appropriately designed, it can lead to a sick building syndrome, wherein people working in the hospital may end up with hardships like uneasiness, headache, migraine, and anxiety. The focus should be on maintaining good air quality and very stringent acoustic levels, especially for the ICU.

In the post-construction phase, adding



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1. Natural light and ventilation: Skylit hospital atrium, Alexis Hospital, Nagpur





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**— Sneha Gurjar,**  
 Director, CFM  
 Engineers

the complexity of construction detours and system shutdowns require excess planning, patience, and understanding from the construction team involved with upgrading or expanding a facility. Post-construction, commissioning stage standards for cleanliness and good hygiene are higher in a hospital or medical context. Dr Abhishek contends, "You must keep in mind that the cash flows tend to be negative for the first three years, but in this phase, you must keep prices low and maintain superior service levels. Also, doctors may charge 20-30 percent premium to offer their tier-3 cities, whether you have enough patients or not."

**The good practices to follow**

The challenges can be alleviated if promoters of hospitals follow certain best practices that have evolved over the years and proved effective.

According to Sneha of CFM, using 'Building Information Modeling (BIM)' during the design stage by creating a realistic representation of the whole project is advisable. "This ensures that when we graduate from the design stage to the construction stage, there are fewer problems due to construction-related conflicts and gaps in understanding that often arise during execution. Modern construction technology and pre-fabricated construction help standardize and quality control building components, and adhering

to construction processes, and construction safety ultimately helps achieve better outcomes," she adds.

Endorsing the use of pre-fabricated construction or pre-engineered building, Dr Abhishek said that such a model could reduce the construction time to one to one-and-half years instead of the conventional period of 24-30 months, wherein an entire building block can be replaced, assembled or disassembled quickly. "Hosmac India recently executed a pre-engineered building project in South India, which involved only 10-20 laborers putting the slabs together. This building structure was manufactured at our manufacturing unit," he adds.

**Emerging models of operation**

Several asset-light models are coming into play for healthcare players looking to add additional capacities through brownfield expansion for faster operationalization of beds at relatively lower costs at remote locations. These models include hospital facility leasing and long term tie-ups (7 to 15 years) with local specialists (specific to remote areas), informs Sneha. "Disruptive technologies are shaping the future of healthcare. Emerging technologies can be utilized to cater to the specific challenges faced in remote locations, such as providing consultations and conducting surgeries remotely, thus, improving access to healthcare in remote areas," she expresses.

A trend noticed, especially in the aftermath of the Covid crisis, is that established players in industries, such as construction, hospitality, and (medical) education sectors, are entering the healthcare industry and setting up hospitals. The new entrants include large enterprises like Adani, ITC and DLF groups, and many others. These players are also acquiring 'sick' hospitals to turn them around. Hospitals doing good business but are unable to scale up are also being acquired and rebranded. Asset-light models have come into vogue, wherein the 'developer' will own the land, do the engineering

