

HEALTHCARE RADIUS

Aligning business and healthcare in India

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DAUNTLESS DESIGNERS

THE POWER LIST OF ARCHITECTS WHO ARE DISCARDING ARCHAIC
CONCEPTS OF DESIGNS AND RE-SHAPING HEALTHCARE LANDSCAPE



Manu Malhotra

Founder Partner, RSMS Architects



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Location: New Delhi

Professional qualification: B Arch, College of Architecture, Pune University.

Company background: It all started when Manu Malhotra was engaged in designing a multi-speciality hospital during his final years of academics. "Ever since then, I had the desire to work on healthcare projects. Later, when I got into professional practice, I gained some experience from my initial healthcare projects and worked with some leading healthcare designs firms in the US. In late 90's, the corporate hospitals had just started entering the private health arena, and there were not many architectural practices in the India doing that," says he.

Fascinated by the international practices of planning healthcare facilities, Manu wanted to bring in the best of them to Indian healthcare. Meanwhile, healthcare in India was undergoing metamorphosis, promising boundless opportunities. So in 2006, Manu decided to start RSMS Architects along with three of his fellow partners, and today the company

has grown into one big RSMS family with a dedicated studio for healthcare.

Projects you worked on:

Some of the recent Indian projects:

- RGCIRC, Delhi
- Apollo-Medics Super Specialty Hospital, Lucknow
- Regency Hospital, Lucknow
- Proton-Therapy Centre, Haryana

International projects being associated with:

- Chicago Children Hospital, USA
- KKMC hospital, Saudi Arabia
- Legacy Salmon Creek Medical Center, Washington
- Providence Regional Medical Center, Washington

Uniqueness of some of the projects that you were engaged with:

Rajiv Gandhi Cancer Institute & Research Centre (RGCIRC), New Delhi: A 600 bed oncology super speciality hospital with built up area of around 5 lakh square feet is one of the largest cancer centres for in Asia. The facility houses seven radiation bunkers, 2 PET CTs, Gamma Camera, 16 ORs, 18 beds for BMT ICUs, 6-bed leukemia ICUs, etc. The facility also has North India's first exclusive paediatric cancer care unit.

The process of developing the design concepts for RGCIRC required the design team to attain a deep understanding of the working of the hospital. "This was very important as the redevelopment and expansion is set to happen in and around a fully functional healthcare facility without any disruption," says Manu. Other major challenges were traffic control on site, soil retention- stabilisation and excavation next to existing buildings, Construction of additional floors over existing structure, shifting of MEP services and others.

Automated MLCP block: In order to unlock the potential of the site, automated MLCP

1. Apollo-Medics Hospital in Lucknow.

building was proposed with a 486 cars and future provision of additional 185 cars.

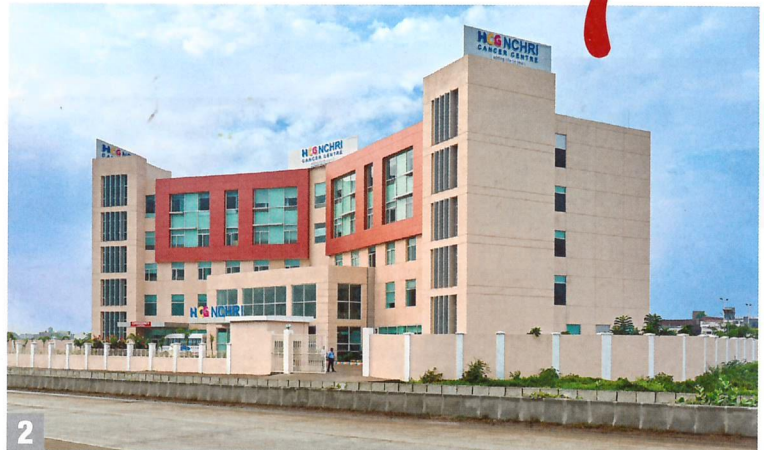
Apollo-Medics Hospital, Lucknow: A 330 bed multi-super speciality hospital is the first hospital in Uttar Pradesh to attain LEED-Gold certification. With built-up area of around 3.3 lakh square feet, the facility offers quaternary care and houses two radiation bunkers, Pet CT Scan, Gamma Camera, Brachytherapy, CT Simulator, 10 ORs, two cath labs, etc. Located of VIP Road on a compact site, its architectural vocabulary is worthy and compliments the grandeur of the location.

Projects of yours in the pipeline:

- A couple of large multi-specialty hospitals in West Bengal.
- Tertiary healthcare centers in Madhya Pradesh.
- A boutique facility in Bengaluru.

Challenges that you overcame for your projects:

- **Traffic control on site:** The facilities were connected and served by a thoughtfully designed road network with carefully located access points. The emergency and main entrance drop-off points were planned separately and, at the same time, were prominently visible from the main site entrance in order to avoid traffic confusion.
- **Construction of additional floors over existing structure:** In one of the hospital projects, Manu faced the challenge of additional floors to be constructed over existing facility. "We first strengthened the existing structure by carbon wrapping and then used metal decks all around the building to facilitate the construction," says he..
- **Shifting of services:** With the expansion of the one of the tertiary healthcare centres at Madhya Pradesh, there came the need for the expansion of services as the existing services were insufficient. In order to facilitate the same, Manu planned the construction into various phases with proper sequencing of shifting and expansion of services.



How healthcare architecture has changed in the last one decade: According to Manu, some of the trends which designers and promoters need to keep innovating:

- Prefabricated structures.
- Sustainability leads to reduced operational cost.
- Waiting areas addressing overcrowding and addressing of millennials.
- Patient room design: Hybrid type

Predict some future trends in healthcare architecture:

"The hospital of the future may look quite different than the hospitals of today. Rapidly evolving technologies and growing consumerism, along with demographic and economic changes, are expected to change the face of future hospitals worldwide and for sure in India," says Manu.

- Flexibility in design and master planning- Remodeling of healthcare facility .
- Modicare/ Ayushman Bharat impact.
- Automation and AI - digital patient experience. [HR](#)

2. HCG-NHRI in Nagpur.

3. Rajiv Gandhi Cancer Institute and Research Centre at Rohini in New Delhi.