**Noida Medical Center (NMC)** is a respond to the rapidly growing need for hospital and ambulatory care in newly-developed urban area of Noida, India. As a teaching hospital, NMC intends to drive excellence in healthcare delivery through academics and research. Having to accommodate 860 beds in approximately 1,100,000 GSF, NMC has to resolve the complexity of site access, inter- and intra-departmental circulation as well as clinical, public, and material traffic flows. The project is expected to comprehend the understanding of hospital planning, environmental, and evidence-based design for better patient outcome, patient safety, and user satisfaction.

Noida Medical Center provides the feeling of home care by mimicking India’s local living pattern and urban context. Three main design decisions are derived based on the study of two neighborhood samples in Noida. First, the design provides multiple courtyards following Noida’s urban pattern with shared spaces around the neighborhood area. Courtyards are meant to be used collaboratively to enhance India’s spirit of sharing. Second, the height to width ratio in courtyards and main corridors resemble Indian traditional courtyards and alleys to maintain similar spatial experience for people navigating in the hospital. Third, the typical vertical division of function in Indian buildings are emulated by locating private spaces on the top floors and public spaces on the bottom floors.

NMC is purposely made very low to minimize gigantic architecture feeling in the context. Main building is located in the center with major functions to facilitate the need of inpatient care towers surround it. Perceived as neighborhoods, nursing units are color coded and divided based on patient’s acuity level and center of excellence. The nursing units are organized in the 3rd, 4th, and 5th floor while the two bottom floors are lobby, retail, and educational space dedicated for promoting population health. Three expansion strategies are constructed to accommodate hospital’s future development. There are two floors of shell space in the main building for the expansion of diagnostic and therapeutic department. The space below nursing units is dedicated for outpatient future expansion. Nursing unit tower can also expand to the north-west and north-east side to accommodate more patient rooms.

The exposure to the outside is much needed to release the stress of patients and medical staffs as well as wayfinding feature. The design provides atriums, gardens, and open corridor to introduce more daylight into the interior space. A series of healing gardens are placed in every two nursing units. These gardens are specifically design based on the need of general patients, labor and delivery patients, and nurse. In each patient rooms has vegetations located by the window to provide proximity to natural feature. It is located behind a movable screen that can serve as a shade and multimedia to deliver health education.

The design of NMC is guided by the vision to create comfortable and low stress healthcare environment through home-like environment. The celebration of openness, locality, and community-oriented service are the key strategies to provide excellent medical service and promote population health in Noida.
NOIDA MEDICAL CENTER
HOSPITAL THAT RESPONDS TO THE LOCAL LIVING PATTERN OF INDIA

CONCEPT

I. PLAN FORMATION OF LOCAL NEIGHBORHOOD BUILDINGS

II. RATIO OF WIDTH AND HEIGHT OF LOCAL BUILDINGS

III. VERTICAL FUNCTIONAL DIVISION

SITE SECTION

Local Street Scope
Design Implication


**SITE PLAN**

**GROUND FLOOR PLAN**

**THIRD FLOOR PLAN**

**BAZAAR PERSPECTIVE**

**MASSING STRATEGY**

- Main Building
- Shall/ Public Space
- Neighborhoods
- Courtyards

**EXPANSION STRATEGY**

1. Two floors of shell space on the main building for outpatient service future development.

2. Soft spaces on the floors below nursing unit to accommodate the expansion of public spaces.

3. Tower expansion to the preserved land to anticipate hospital's continuous growth.
SECTION PERSPECTIVE

USER EXPERIENCE
I. FAMILY MEMBER VISITOR

22-year-old waiting for family member’s surgical procedure.

II. PEDIATRIC PATIENT

6-year-old suffering from continuous shivering and has to be hospitalized right after X-ray will wait indemnity.

III. HIGH ACUITY EMERGENCY PATIENT

13-year-old got into an accident and sent to ICU by ambulance. Had to go through surgery immediately and remain unstable so he has to be cared in the ICU.
HEALING GARDEN LAYOUT

- Inpatient Garden
- Nursing Garden
- LDRP Garden

SCREEN CASE 1

1. Slab extension & wooden strip help to provide shadow against overheated sunlight
2. Plants help to reduce noise pollution
3. Jali Panel & plants help to cool down the hot air from outside

NURSING UNIT [23 medical/surgical beds & 1 isolation room]

PATIENT ROOM LAYOUT

CURTAIN WALL DETAIL

1. Steel extension & wooden strip help to provide shadow against overheated sunlight
2. Plants help to reduce noise pollution
3. Jali panel & plants help to cool down the hot air from outside