



BRINGING CRITICAL CARE EXPERTISE
TO ALL, REMOTELY.





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ABOUT

medanta



With its Gurugram hospital being voted the best private hospital in India, Medanta has been fulfilling the country's need for super-speciality medical institutions since 2009. It offers:

- Skilled and experienced doctors
- High-end medical equipment and technology
- Integrated tertiary care infrastructure
- Clinical and operational innovation
- Research and academics
- Best-in-industry practices

Most importantly, we make all these facilities available for patients across the country at very affordable prices.

We are equipped to make quality affordable healthcare a reality for countless patients with an infrastructure built according to the guidelines for healthcare facilities by the American Institute of Architects. Thus, to ensure quality healthcare we have:

- Network of 5 multi-speciality hospitals (with 1 more under-construction) and 6 clinics across 8 cities.
- 4.27 million sq. ft. of built-up area with additional land for ancillary services
- Facilities for over 30 medical specialities*

- 1440+ doctors*
- 8,000+ full-time employees and retailer-based staff*
- 69 operation theatres*
- 2,467 beds installed* (expanding to over 3,500 beds by FY2025 end)
- 550+ ICU beds*
- More than 2 million patients treated across IPD and OPD*
- Accredited by JCI (Gurugram hospital) and NABH (Gurugram, Indore, Lucknow and Ranchi hospitals)
- Medanta has served patients from over 130 countries with over 10,000 patients from the Middle East.



*Figures as of 2023.

MEDANTA: A LEGACY OF ACCOLADES

Putting quality care for patients first and foremost through highly-skilled doctors and medical experts is an approach every hospital and healthcare centre should have. For Medanta, the success of this approach itself speaks volumes.



MEDANTA'S DOCTORS: THE BEST OF SKILLS AND EXPERTISE



- Founded by **Dr. Naresh Trehan**, a world-renowned cardiovascular and cardiothoracic surgeon, our clinical team includes recipients of Padma Bhushan, Padma Shri and BC Roy Awards, in addition to numerous other accolades.
- Our senior doctors are trained in leading medical institutions in India and across the world, with over 70% of the original clinical department heads in Gurugram who continue to be associated with Medanta since 2009.
- Our day-to-day operational governance is overseen by senior members and each speciality operates on a joint rewards system.
- Majority of our doctors work full-time exclusively at Medanta hospitals.
- Our departmental concept enables sub-specialisation and a combined team-based approach to patient care.
- Departmental autonomy drives clinical practice to ensure the highest standards of healthcare.

MEDANTA'S NATIONAL NETWORK OF HOSPITALS

Medanta's mission to make super-speciality hospitals with top-of-the-line healthcare facilities the norm in India has evolved into a vast network of hospitals throughout the country.

Medanta Super Speciality Hospital, Indore

Operating under the Medanta brand since 2014, the infrastructure has expanded to **175 installed beds** and **53 ICU beds**.

Medanta Hospital, Lucknow

Established in 2019, it currently has **475 installed beds** and **130 ICU beds**.

Jai Prabha Medanta Super Speciality Hospital, Patna

Since starting its OPD facilities in 2020, the hospital has expanded its IPD facilities in 2022, with **330 installed beds** and **57 ICU beds**.

Medanta Abdul Razzaque Ansari Memorial Weavers' Hospital, Ranchi

Since starting operations under the Medanta name in 2015, the hospital infrastructure has expanded to have **200 installed beds** and **54 ICU beds**.

Medanta Hospital, Noida (Under Construction)

Expected to start operations in FY 2025, this hospital has been planned with **550 beds**.



WHY SHOULD YOU HAVE eICU?

In today's day and age, eICUs, or remote ICUs have become essential for all hospitals. From being able to provide care remotely to a larger number of patients to ensuring both patient and staff safety, here are a few reasons why eICUs are the need of the hour:

Quality Care:

Having intensivists who can tele-monitor patients in critical care lends itself to lower mortality rates, shorter hospital stays for patients and improved patient results overall.

Ideal for patients and families:

eICUs result in fewer patient transfers to other facilities, reduced cost of patient care and improved patient and family satisfaction.

Perfect fit for smaller hospitals and clinics:

Having an eICU infrastructure in place helps smaller hospitals and clinics monitor a greater number of patients through lesser staff, since patients are being monitored remotely.

Makes medical staff more capable:

eICUs help with medical staff shortages, as well as prevent clinician burnout by taking some workload off the medical staff, while also training them in taking care of patients in varied hospital ICUs.

Critical for COVID-19 and COVID-19 like situations:

eICUs lend themselves to patients being able to access quality care without compromising the health and safety of their own person, or that of the physicians and caretakers.

HUB AND SPOKE





ABOUT MEDANTA eICU

Quality expertise and care for remote ICUs 24x7

ICU or Intensive Care Unit is a place where knowledge, skills, character, communication and quick thinking are mandatory at all times. Patient safety and the outcome of their post-surgery recovery depends entirely on team dynamics, cohesiveness and the commitment and contribution of each individual team member.

When it comes to treating a diversified patient population, the need for professionals with a multidisciplinary background has been ever-increasing, especially in the closed ICU systems. Every new patient in the ICU poses a different challenge which requires looking at the particular case from multiple perspectives before arriving at a diagnosis.

To meet the current demand of modern critical care and to make sure that patients' care is not compromised, Medanta is all set to commence India's most unique and unmatched e-ICU command centre.

How do we make it happen?

With our Wipro GE team who work on establishing the Tele-ICU interface, both software and hardware, maintaining Tele-ICU connectivity at both ends, setting-up back-up options for connectivity including, but not limited to telephonic calls, WhatsApp video calls and Skype calls.

- 20% gap in the demand for ICU beds as on 2020
- About 30,000 intensivists are needed against the current number of 750 practising intensivists as on 2020

WORLD CLASS CRITICAL & EMERGENCY CARE

The Critical Care unit at Medanta constitutes a devoted team of anesthesiology and surgical intensivists, critical care nurse practitioners, and respiratory therapists. All our Intensive Care Units, High Dependency Units & Post-Operative Recovery Rooms are well-equipped and closely supervised with stringent infection control and isolation protocols.



• Organ-specific ultra-specialist doctors and experts:

Our team of super-specialist intensivists include experts for all different organs of the body. We are dedicated to providing the best care right from diagnosis to treatment, and beyond.



• Specially-planned infrastructure to support critical care patients:

We boast of a dedicated team of 379 doctors across 5 units for emergency, Critical Care and Anesthesiology departments, along with 500+ paramedics and nursing staff members.



• Skilled doctors working with high-end technology:

We maintain a 1:1 patient to nurse ratio, each of whom is trained by critical care doctors. In addition, our anesthesiologists provide safe, consistent and continuous pre-operative care.



• Strict protocols to deliver consistent quality care:

Be it admission, discharge and triage protocols, ailment related protocols, dietary and nutrition protocols or equipment management protocols, Medanta always makes it a priority.



• We are a teaching institute:

We are committed to building the future of healthcare through our teaching programs. These include:

- DrNB Cardiac Anesthesia
- DrNB Critical Care Medicine
- FNB Transplant Anesthesia
- DrNB Neuro Anesthesia
- DNB Emergency Medicine
- DNB Anesthesiology

ELEVATING PATIENT SAFETY & CARE

At Medanta, our objective is to make our eICU services available throughout nooks and crannies of the country. Part of that endeavour is to make sure that our world-class experts are physically available to our patients whenever required. To that end, we have created a strong infrastructure to meet those needs on a long-term basis.

This includes Medanta's 'Flying Doctors India', which equips a fleet of 7 aircrafts with a dedicated team of specially trained doctors, nurses, pilots and support staff to help evacuate patients from even the most remote areas. It provides ailment-based specialists and air-worthy equipment including neonatal ventilators and IABPs, all of which are available 24x7.



Every Medanta hospital is a Level 1 trauma facility, offering round-the-clock advanced acute cardiac care services.

We offer:

- Dedicated infrastructure for acute heart patients that includes an 18-bedded Heart Command Centre which is integrated (and co-located) with our emergency unit so diagnosis and treatment can be carried out within minutes.
- Specialised monitors, defibs and IABP machines beside every bed in the emergency ward.
- A 24x7 emergency rescue team that operates roads as well as air ambulances that are equipped with Advanced Cardiac Life Support (ACLS) systems.
- Specially trained teams including a cardiologist, anesthetist and perfusionist can insert intra-aortic balloon pumps (IABPs) to stabilize patients even before they reach the hospital in case of cardiac emergencies.

Medanta's Critical Care infrastructure includes:

- 4 dedicated cardiac ICUs with >80 beds to provide 24x7 care for adult and pediatric patients.
- Round-the-clock cardiac critical care with four dedicated cardiac ICUs including an 18-bed Heart Command Centre co-located with the Emergency unit for acute cardiac critical care, 2 fully staffed dedicated cardiac ICUs with 22 beds each and 1 post-cath ICU for patients undergoing interventional procedures.
- ICUs are equipped with sophisticated patient monitoring equipment and include state-of-the-art isolation of air handling units, dedicated negative-pressure rooms for infected patients, etc.
- Pediatric Critical Care capabilities include dedicated infrastructures in ICUs that can offer intensive care to pediatric patients of all age groups including infants and neonates.
- A post-surgical management of tracheostomised infants with complex congenital defects, intensive care for infants' post-cardiopulmonary bypass procedures, mechanical ventilation, pre-operative intensive care including stabilization with ventilation and inotropic support, peritoneal dialysis catheterisation, etc.

HOW WE DO IT: THE INNER WORKINGS OF MEDANTA eICU

The Medanta eICU infrastructure has been optimised for the most efficient and effective patient care. Here's a step-by-step breakdown of our eICU process:



MCC ICU CONSULTING TEAM

MCC ICU system is a closed ICU system based on monitoring critical care, therapeutic critical care and diagnostic critical care.

Our diverse team comprises of super-specialised ICU professionals who provide clinical opinion during the monitoring and troubleshooting phases of critically-ill patients. Their therapeutic decisions are based on evidence and guidelines, as well as their training of working simultaneously towards identifying issues and diagnosing remote ICU patients.

Our team members are specialised in:

Internal Medicine

Critical care medicine practice with diagnostic intent, timely handling of comorbidities in correlation with critical issues and providing optimised nutrition for a critical patient.

Infectious Diseases

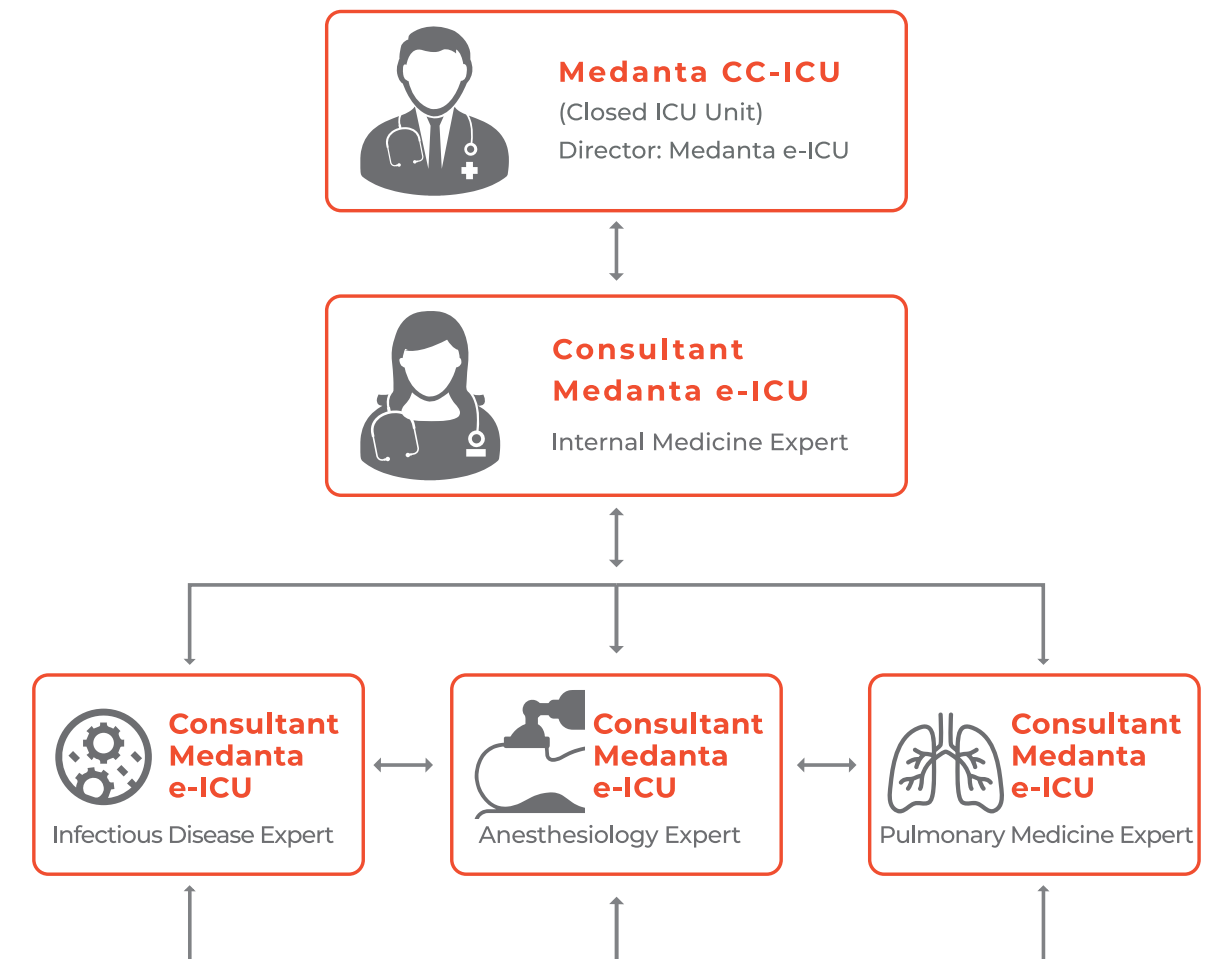
Antibiogram and interacting with microbiologists/HIC, antimicrobial clinical pharmacology and antibiotics stewardship with difficult-to-treat infections in the ICU (XDR/PDR).

Anesthesiology

Difficult airway management and invasive procedures, cardiopulmonary resuscitation and hemodynamic management along with pre-operation stabilisation and post-operation ICU management in surgical/trauma cases.

Pulmonary Medicine

Expert handling of chronic lung disorders, timely decision-making for the use of bronchoscope therapy/diagnostic interventions and personalised non-invasive ventilation (NIV) therapy in the ICU.



TECHNICAL REQUIREMENTS

GE Centricity High Acuity Critical Care Software LIC ICU/PICU

ICON D700 12xCamera, Codec with PTZ control

Trolley with camera mount and display (Made in India)

Laptop 15" Display with 1920*1080 Resolution Core i3 processor with 250 GB storage

Integration connection box (IOT)

Integration Cables

Noise Cancelation Headphones

REMOTE CENTRE-ICU ELIGIBILITY CRITERIA FOR MCC-ICU

I Licenses		Specifications
1. Hospital approval	2. Fire License	3. Drug & Narcotics
4. Bio-medical waste	5. PCPNDT	
II Radiology Services		TAT (Range in hours)
1 X-ray	1-2 hours	Inhouse
2 USC	2-4 hours	Inhouse
3 CT/MRI	2-6 hours	In-house/Outsourced
III Laboratory Services		TAT (Range in hours)
1 ABG/VBG	Within 30 minutes	In-house/Outsourced
2 CBC	2-4 hours	In-house/Outsourced
3 LFT	2-4 hours	In-house/Outsourced
4 KFT	2-4 hours	In-house/Outsourced
5 Coagulation profile	2-4 hours	In-house/Outsourced
6 Viral markers	1-2 hours	In-house/Outsourced
7 Serum Amylase, Lipase	2-4 hours	In-house/Outsourced
8 Gram Stain	4-6 hours	In-house/Outsourced
9 Microbiology - Culture/Sensitivity	48-96 hours	In-house/Outsourced
10 Serum Procalcitonin	2-6 hours	In-house/Outsourced
11 Hs-Trop-I, CRP	2-4 hours	In-house/Outsourced
12 Urine R/M	2-4 hours	In-house/Outsourced
IV ICU Services		Numbers
1 8-10 Bedded ICU	Minimum 8 beds	In-house
2 Critical care Ventilators	Minimum 3	In-house
3 Transport ventilator	Minimum 1	In-house
4 HFNC	0 - 1	In-house
5 Oxygen supply	24/7 supply	In-house
6 Crash cart-emergency drugs	Minimum 2	In-house
7 De-fibrillator	Minimum 1	In-house
8 Hemodialysis machine	Minimum 1	In-house
9 Nebulisation machines	Minimum 2	In-house
10 Infusion pumps	Minimum 5	In-house
11 DVT pumps	Minimum 4	In-house/Outsourced
12 USC machine	Minimum 1	In-house
13 Intubation/Procedure trolley	Minimum 1	In-house
14 Negative suction apparatus	Minimum 1	In-house
15 Rehab - Recliner	Minimum 1	In-house
16 Air mattress	Minimum 2	In-house
17 Bronchoscope	Minimum 1	In-house/Outsourced
18 Nursing staff : ICU bed ratio	1:2 – 1:3	Well trained to perform ICU monitoring & patient care.
19 ICU Doctor	1 Doctor every shift	Well trained to perform ICU emergency procedures.
20 ICU Technician	1 Technician every shift	Well trained to assist ICU emergency procedures.

REMOTE CENTRE-ICU ELIGIBILITY CRITERIA FOR MCC-ICU



V Surgical Services		TAT (Range in hours)	Specifications
1	Orthopedics	1-6 hours	MS/DNB/D.Ortho
2	Obstetrics-Gyne	1-6 hours	MS/DNB
3	Neuro-Surgery	1-6 hours	Mch/DNB
4	General Surgery	1-6 hours	MS/DNB
Medical Services		TAT (Range in hours)	Specifications
1	Cardiology	1-6 hours	DM/DNB
2	Gastro-enterology	1-6 hours	DM/DNB
3	Pulmonology	1-6 hours	DM/DNB/MD
4	Neurology	1-6 hours	DM/DNB
5	Nephrology	1-6 hours	DM/DNB/MD
Blood Products		TAT (Range in hours)	Specifications
1	PRBC, Whole blood	2-6 hours	2-6 hours
2	FFP	2-6 hours	2-6 hours
3	RDP	2-6 hours	2-6 hours
4	SDP	2-6 hours	2-6 hours
5	Cryoprecipitate	2-6 hours	2-6 hours
Intervention Facilities		TAT (Range in hours)	Specifications
1	Hemo-dialysis	1-4 hours	In-house
2	Endoscopy, Colonoscopy	1-4 hours	In-house
3	Bronchoscopy	1-4 hours	In-house
4	Inter-Costal Drain (ICD)	1-4 hours	In-house
5	Temporary Pacemaker	1-2 hours	In-house
6	CathLab	1-2 hours or refer	In-house/Outsourced
MRD-TPA		Specifications	
1	Record keeping	Digital or Paper-File	
2	TPA – Documents	TPA desk	
Hospital Quality & Sterilization		Specifications	
1	Housekeeping	--	
2	CSDD	--	
3	HIC	1 ICN per 20 ICU beds	
4	Grievance manager	1 round the clock	
5	Finance Manager-Counsellor	1 round the clock	

CONTACT US

For further information, you can reach us at:
Medanta eICU Command Centre

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