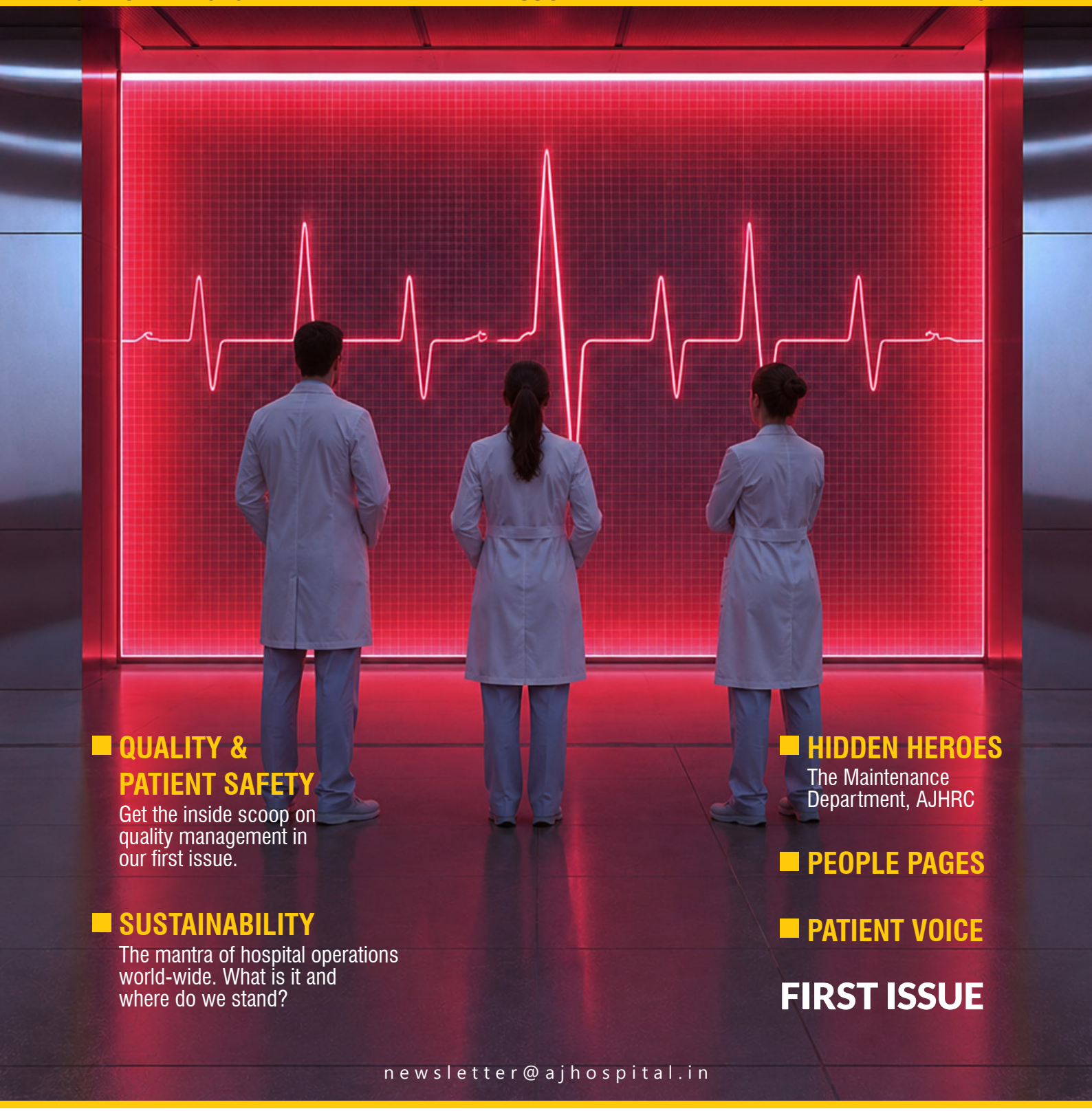
AJ Pulse

Hospital Newsletter

JANUARY 2026 ISSUE 1 VOL 1



QUALITY & PATIENT SAFETY

Get the inside scoop on quality management in our first issue.

SUSTAINABILITY

The mantra of hospital operations world-wide. What is it and where do we stand?

HIDDEN HEROES

The Maintenance Department, AJHRC

PEOPLE PAGES

PATIENT VOICE

FIRST ISSUE

newsletter@ajhospital.in

A. J. Hospital & Research Centre

AJ Pulse: 'The Heartbeat of Our Hospital Community'

The AJ Pulse newsletter is a defining publication envisioned by our senior leadership and purposed by the Human Resources department and the Editorial team. It is a reflection of the people, practices, and progress that define the AJ Hospital and Research Centre- our hospital. An echo of our hospital's healing halls and corridors, it is the collective voice of physicians, nurses, managers, technicians, staff, teachers and students. This first edition of the AJ Pulse brings together quality initiatives, operational excellence, industrial knowhow, employee achievement, academic innovation patient perspective and human moments that shape our day to day into something extraordinary.

As an NABH accredited tertiary care institution and healthcare tour de force, we at the AJ Hospital and Research Centre, believe that quality and care never stand still. At the same time., we are connected with the voices around us, both in the community and the wider world arena. We innovate- we grow; we listen- we learn. We never stand still.

That's why this publication is monumental- a testimony to the hard work and hidden contribution of those working tirelessly behind the scenes- to save lives. Everyday heroes, in scrubs and gowns.

Through shared experiences, achievements, and reflections of our employees embodied in these pages, AJ Pulse aims to foster transparency, collaboration, and a culture of continuous improvement in our organisation, aligned with national healthcare quality standards.

Welcome to a space where knowledge meets compassion and every pulse tells a story.

newsletter@ajhospital.in

A. J. Hospital & Research Centre

AJ Pulse

We thank the Almighty for this first issue of the AJ Pulse Newsletter

FIRST ISSUE

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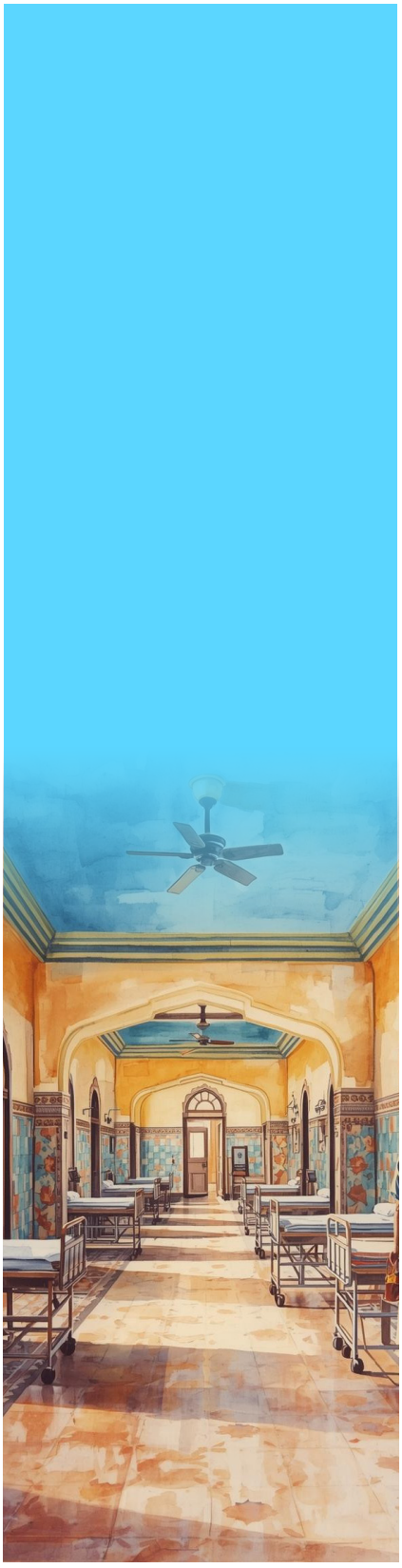


FROM THE DIRECTOR'S DESK

Dr Prashanth Marla K.
M.S, M.Ch, (Uro),
Transplant Surgeon & Medical Director, AJHRC

It is with great pleasure and pride that I welcome you to the inaugural edition of the A.J Pulse, the quarterly internal newsletter of the A.J. Hospital & Research Centre.

AJ Pulse serves as an internal publication meticulously curated to highlight staff achievements, new initiatives in each quarter, research articles and publications pertaining to healthcare industrial trends and employee engagement activities at the A.J. Hospital & Research Centre as well as academic initiatives of the A.J. Institute of Hospital Management.

By spotlighting our internal successes and contributions, we not only honour the hard work of our dedicated professionals but also inspire the next generation of healthcare leaders.

I wish to extend a special thanks to the Newsletter Committee. Your vision and painstaking effort in bringing this platform to life are truly commendable.

I encourage every staff member to engage with this newsletter, share your insights, and help us continue our mission of providing 'world-class healthcare with a human touch.'

Let this newsletter be the impulse that drives us toward achieving even greater milestones.

Dr. Prashanth Marla

FROM THE DIRECTOR'S DESK

Dr Amitha Marla, MD
(Hospital Administration)
Director Medical Administration
AJHRC

It is a moment of great institutional pride as we unveil the inaugural edition of AJ Pulse, the official quarterly newsletter of A.J. Hospital & Research Centre.

AJ Pulse is designed to be a platform to highlight our milestones, share innovative management practices, and keep our entire AJ team and community connected.

Whether it is a breakthrough in patient care, a new academic achievement or hospital events and community engagement, this newsletter will capture the heartbeat of our organisation.

I would like to extend a special thanks to the Newsletter Committee. Your tireless efforts in conceptualising, designing, and curating this first edition have been exemplary. You have created more than just a publication; you have built a forum that reflects our shared commitment to 'Health, Hope and Happiness'.

I encourage every staff member and student to contribute, engage, and make AJ Pulse a true reflection of the passion that defines us. Together, let us continue to set new benchmarks in healthcare.

Dr. Amitha Marla

EDITORIAL NOTE

Primrose Vishnu
Associate Professor,
AJ Institute of Hospital Management,
Editor- in Chief, AJ Pulse

Decades ago, I first entered the beige edifice of AJ Hospital and Research Centre not as an employee, but as an anxious attendant wheeling my mother in for an MRI. At the time, the AJ Hospital and Research Centre was one of the few institutions in the city housing such state-of-the-art technology. Years later, I returned to join this "kaleidoscopic" workforce, discovering a professional home within these corridors.

Today, we are more than a facility; we are AJIANS. From upper management and clinical specialists to ancillary and auxiliary staff, faculty members and students, we share a singular mission: to touch lives through excellence.

It is with immense corporate pride and utter excitement that I unveil to you the inaugural issue of AJ Pulse. This newsletter is our collective voice, full of potential a rhythmic amalgamation of patient experiences, industry insights, and the in-house achievements that define the indomitable spirit of AJHRC.

Inside This Issue

The Gold Standard: Our main feature explores the theme Quality management in healthcare and the workings of the Quality Department. As an NABH-aligned, institution, we view quality not as a static benchmark, but as a living culture of safety and ethics. From the beginnings of the quality movement in the US to its entry into modern healthcare operations, we step back in history to the roots of quality improvement.

Green Healthcare: We delve into the Sustainability of healthcare operations, our special feature in this issue. We examine how AJHRC is navigating climate change and "going-green" initiatives within healthcare operations. Doctors and environmentalists alike now view sustainability not as an add-on,

but as a core component of health outcomes. Climate change including air pollution, heatwaves, and vector-borne diseases are increasing the disease burden on communities and healthcare systems alike. Hospitals, therefore, bear a moral imperative to limit their contribution to these health risks even as they treat them.

In this issue, we go behind the scenes with the Maintenance Department, the "Hidden Heroes" keeping our infrastructure seamless. We also explore the technical updates on infection control, AI-integrated patient safety, PREM and PROM quality tools, it is measures of patient experiences and outcomes as well as.

Patient Voice: We sit down for a chat with patient, Mr. Ashok Shenoy to unpack his journey at AJHRC.

People Pages: Looks at the stunning achievements of our staff as well as the hospital calendar of the last quarter. Also a glimpse of our efforts at community outreach through Vriddhi elderly engagement.

Medical Marvels: Explores evolving clinical technologies such as the use of the diffusion-weighted MRI scanner in stroke diagnosis.

MedMind: Reports on the latest healthcare headlines round the world.

College Chronicles: A glimpse of the achievements of our staff and students at the AJ Institute of Hospital Management as well as thought pieces by faculty members and students.

At the AJ Hospital and Research Centre, the year has been marked by a renewed focus on the patient experience and a commitment to professional growth. As you turn these pages, I hope you feel the heartbeat of our hospital's progress. AJ Pulse is a testament to our people and our practice. Hence the motto: AJ Pulse: Our Vision, Our Voice.

Primrose Vishnu
Editorial Team,
The AJ Pulse.

We welcome your feedback and look forward to hearing from you.
Write to us at newsletter@ajhospital.in

GOLD STANDARD

HEALTHCARE QUALITY

A DA I L Y COMM I TMENT TO PA T I ENT S A F E T Y

Mrs. Primrose Vishnu, Associate Professor, AJIHM

THE QUALITY REVOLUTION

Quality management in healthcare refers to the systematic approach to ensuring that healthcare services meet established standards and continuously improve patient care. It is not about doing something extraordinary; it is about doing ordinary things with sincerity and attention, with consistent effort.

At the A.J. Hospital and Research Centre, quality is a quiet promise we renew every single day; in the way we communicate, the way we support each other, and the care we offer to every patient who walks through our doors.

In an NABH accredited tertiary care hospital such as ours, quality means providing care that is safe, respectful, timely and consistent. It ensures that every patient receives the right care at the right time, in the right way.

But what do automobiles have to do with quality advancement?

In the 1930s, the Toyota company faced a number of challenges. Japan was a relatively small market for cars at the time, and Toyota lacked the scale and resources of established Western automakers.

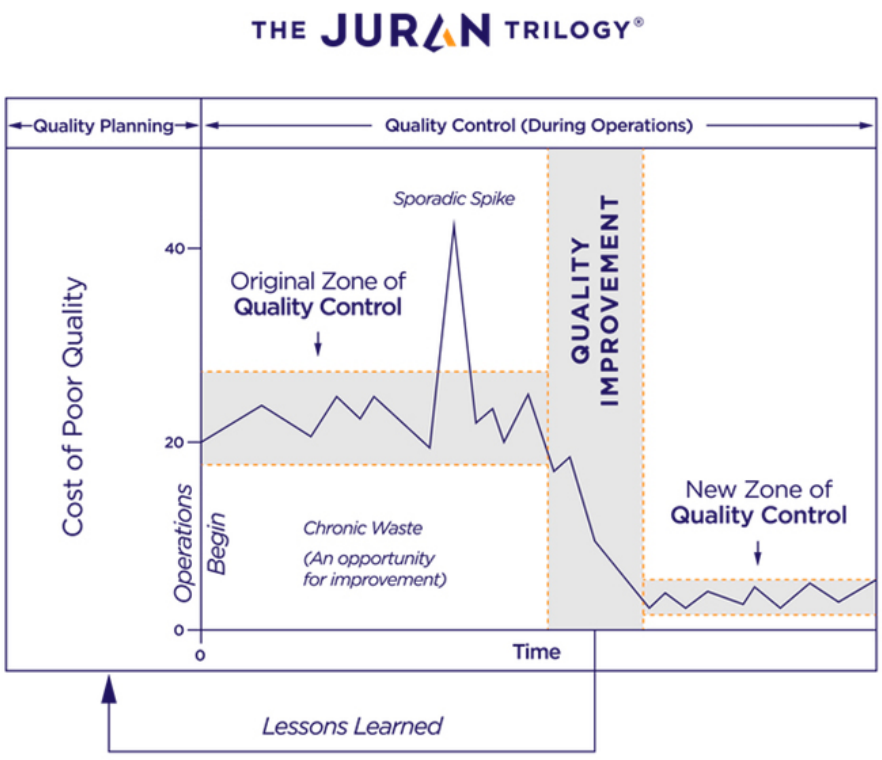
Henry Ford, Founder of the Ford Motor Company and Model T Car inventor.

'Quality is The Right Care At The Right Time, In The Right Way'

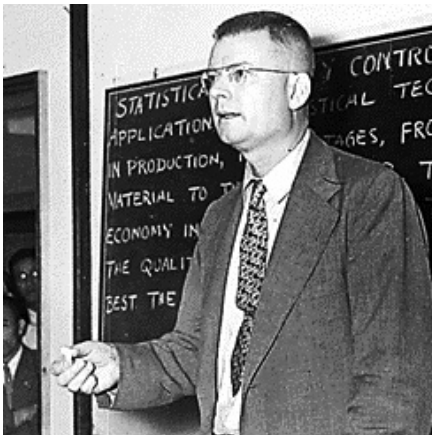
However, Toyota's founder, Kiichiro Toyoda, was determined to create a world-class production system. To achieve this goal, Toyoda turned to the pioneering work of Henry Ford the inventor of the car –'Model T' and the owner of the Ford Motor Company in the United States.

Ford had developed a revolutionary production system based on the principles of standardisation, specialisation, and mass production, which had helped him to create affordable cars for the masses. Toyota recognised the potential of Ford's system and decided to send a team of engineers to the United States to study it firsthand.

The modern quality revolution was sparked in the 1970s when the quality of Japanese goods surpassed those of the US and Europe, and the rest as they say, is history.



- The Juran Trilogy: Three Quality Management Processes for Organisations
- Quality Planning (Quality by Design)
- Quality Control (Process Control & Regulatory)
- Quality Improvement (Lean Six Sigma)



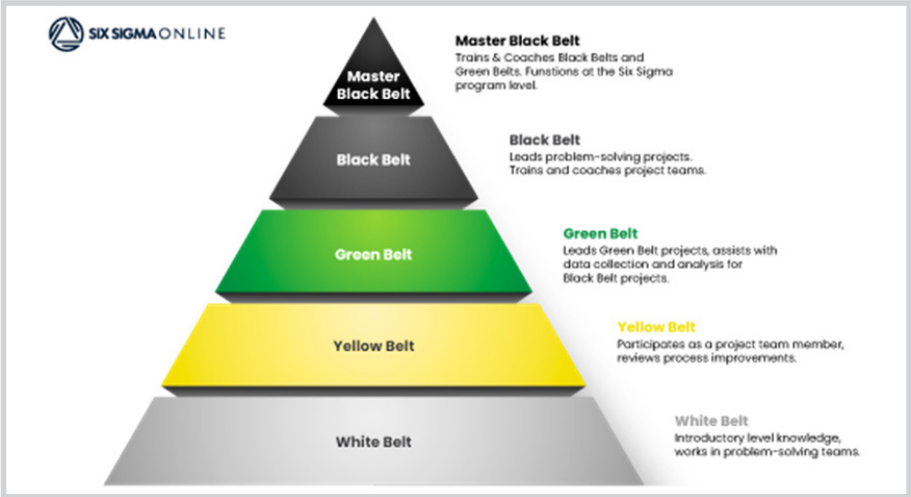
W. Deming, Pioneer and the Founder of the Quality Movement giving a lecture in Japan, 1951.

Pioneers like Walter A. Shewhart introduced statistical quality control methods in the early 20th Century. William Edwards Deming and Joseph Juran, considered quality management gurus who, alongside Philip Crosby, had transformed global manufacturing, began applying their principles to healthcare.

Deming and Juran, the quality gurus who sparked a revolution.

He introduced the Deming Wheel or PDCA cycle and outlined the critical 14 Points of Management in his book 'Quality, Productivity, and Competitive Position' – later retitled, 'Out of the Crisis'.

Juran emphasised the management's role, quality planning and the Pareto Principle or 80/20 rule, for focused efforts. He authored the seminal book, 'Juran Trilogy', which has become the basis for most quality management best practices around the world. Juran's methods were employed to create the data-driven improvement cycle, DMAIC.



W. Deming, Pioneer and the Founder of the Quality Movement giving a lecture in Japan, 1951.

Dr. Joseph Moses Juran, Father of Quality Management Techniques.

Next, the concept of Six Sigma, was introduced by Bill Smith at Motorola in 1986 to improve manufacturing quality. Six Sigma is a methodology that ensures processes are as close to defect-free as possible. It uses statistical tools and a structured certification system, with belts ranging from foundational level, White to expert level, Master Black Belt, and is often integrated with lean manufacturing principles to reduce both waste and defects.

Post-World War II, the focus shifted to healthcare, influenced by the need to improve processes and outcomes. In the 1960s-1980s, the establishment of organisations such as the Joint Commission on Accreditation of Healthcare Organisations (JAHO) in the U.S. brought formal quality standards to hospitals.

By the 1990s, quality improvement methodology was being applied to the working practices of other types of organisations. Initiatives like Total Quality Management (TQM) were adopted in various **healthcare settings.** The focus shifted to evidence-based medicine, promoting the use of data and research to inform clinical decisions. The concept of Patient-Centered Care emphasised patient outcomes and experiences.

At the 1986 ASQ Annual Quality Congress, Juran (second from right) met with W. Edwards Deming (seated) and, from left, H. James Harrington, Mason Westcott and Kaoru Ishikawa .

At the turn of the century, Continuous Quality Improvement (CQI) in combination with established methodologies like Lean and Six Sigma took center stage, with performance measurement, and patient safety initiatives. The introduction of quality metrics and public reporting, such as patient satisfaction scores and safety ratings, became common.

Evolution of QM Certification

- 1959: U.S. Dept. Defense MIL-Q 9858 Standard is established.
- 1969: MIL-Q 9858 is revised into the NATO (North Atlantic Treaty Organization)
- 1974: BSI (British Standards Institution) publishes the BS 5179 "Guidelines for Quality Assurance."
- 1987: ISO – the International Organisation for Standardisation – publishes the ISO 9001 standards.

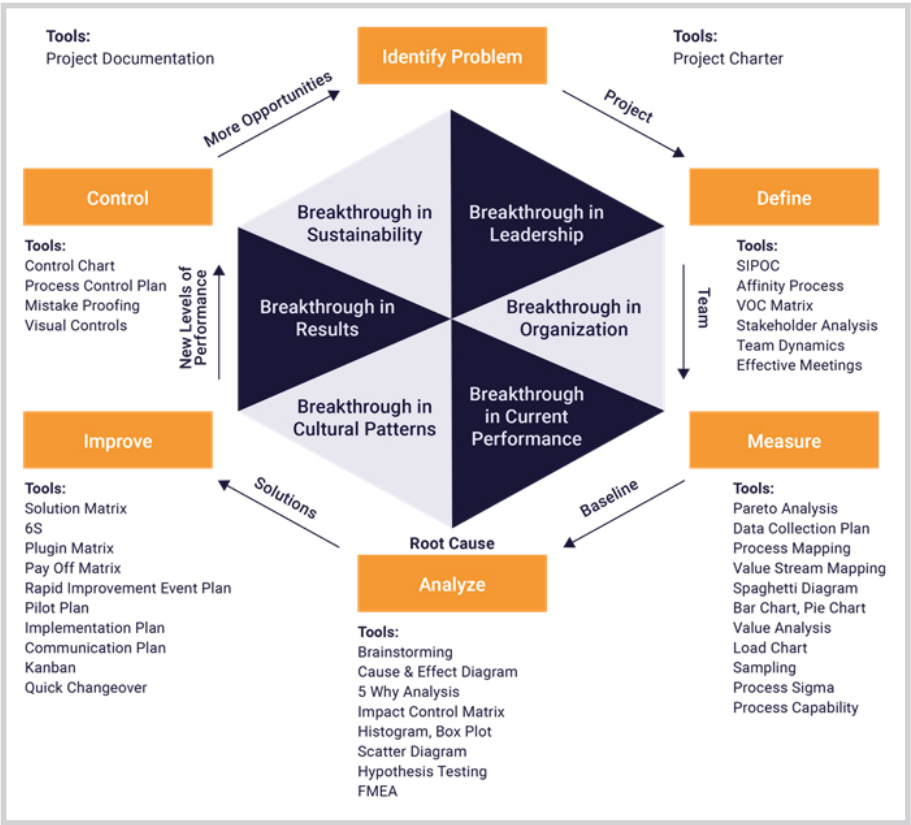
The Indian Case for Quality Healthcare

In India, the formal quality movement started gaining traction in the late 1990s, influenced by the rapid growth of the private healthcare sector and regulatory requirements. The landscape of healthcare accreditation in India is also evolving, with a blend of national and international organisations working to enhance quality standards. For instance, the well-known National Accreditation Board for Hospitals and Healthcare Providers (NABH) was established in 2006 to set quality benchmarks. The Quality Council of India (QCI) an autonomous organisation; the Joint Commission International (JCI), a globally recognised body focusing on international quality standards; the Indian Nursing Council (INC); and the National Health Mission (NHM) are various accreditation bodies fostering a healthcare environment that prioritises high-quality care.

However, compliance is inconsistent, especially in rural areas, due to challenges in regulatory enforcement, varying accreditation standards, and cultural dynamics.

The Role of the Quality Department

"Quality doesn't happen by chance. It happens by choice''. It grows through simple habits clear



DMAIC Quality Management Tool

communication, proper handovers, organised workflows and honest reporting. This is how the Quality Department plays such a vital role in patient safety.

Although much of the departmental work happens quietly in the background, it influences every corner of the hospital- through clinically proven practices, rigorous documentation, careful, empathetic and systematic incident analysis and early risk identification.

A thriving Quality Department keeps the hospital strong, with guidance that supports every hospital team towards patient safety and better health outcomes. Statistics show that quality management can significantly impact the quality of care and the cost.

"Quality is doing ordinary things with extraordinary attention."

Statistics on Quality Management

- A 2019 Agency for Healthcare Research and Quality (AHRQ) study found that quality improvement interventions can reduce hospital readmissions by up to 20%.
- A 2018 Commonwealth Fund study found that patients receiving care from hospitals with strong quality improvement programs are more likely to survive heart attacks and strokes.
- A 2017 study by the Centers for Disease Control and Prevention (CDC) found that quality improvement interventions can reduce healthcar e-associated infections by up to 60%.
- A 2016 study by the Joint Commission found that hospitals with strong quality improvement programs have lower mortality rates than hospitals with weak quality improvement programs.

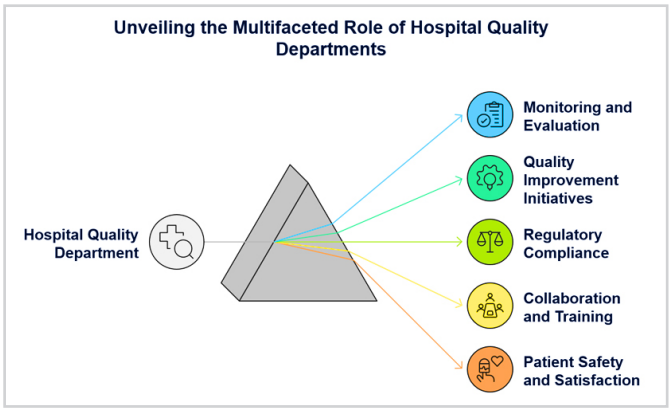
So how important is the Quality department?

From seemingly simple metrics such as patient wait times, and satisfaction or experience scores; to infection or re admission rates, and lengths of stay; evaluating patient safety events, timeliness of care and cost efficiency, as well as accreditation processes; the quality department oversees all of these vital functions.

However, it is obvious that quality is not only the responsibility of the clinical team or the quality department; it is equally shaped by support services, housekeeping, administration, security, and every other unit. Each department's effort contributes to the overall experience of the patient. When each staff member takes responsibility for their part, the whole system becomes safer.

A good culture of quality is built when people feel safe to speak up, share concerns, and offer suggestions. It turns the workplace into a space where learning is welcomed and improvement is continuous. The hospital moves forward when all departments work together with clarity and accountability, as one team; patient safety becomes a natural outcome.

Overall, quality management in healthcare is multidimensional, encompassing every aspect of healthcare delivery. It deals with everything from patient care policies and processes to healthcare systems design and data collection. By investing in quality management, healthcare organisations can improve patient outcomes, reduce costs, and create a safer and more efficient healthcare system.



Staff at work in the Quality Department on the 7th floor of the AJ Hospital

AI DOZEE BEDS FOR PATIENT SAFETY

Mrs. Felcy Pereira, Nursing Superintendent, AJHRC

The nursing division at AJHRC has embraced Dozee, India's first AI-based, contactless Remote Patient Monitoring (RPM) and Early Warning System (EWS), to strengthen clinical surveillance and elevate the quality of care across our wards using indigenous technology. Here's what the Nursing Superintendent, Mrs. Felcy Pereira had to say:

'It gives me immense pride to share how this technology is empowering our nurses, enhancing patient outcomes, and redefining bedside vigilance in our hospital. Our monitoring and surveillance has improved and patient trust has increased''.

Established in 2015, Dozee, founded by Mudit Dandwate and Gaurav Parchani, focuses on contactless health monitoring technology. The technology, patented and made in India, automates vital data and operational processes, a crucial element in AJ Hospital and Research Centre's pursuit of providing quality healthcare.

REMOTE PATIENT MONITORING

In the high-stakes environment of a hospital ward, the "Golden Hour" of intervention is often preceded by the "Silent Minute" that brief window where a patient's vitals begin to shift before a physical crisis occurs. At AJ Hospital and Research Centre, we are narrowing that window to near-zero with Dozee.

Dozee consists of a contactless sensor sheet placed beneath the mattress, which uses Ballistocardiography (BCG) a non-invasive method that detects micro-vibrations produced by the beating of the heart and the movement of the lungs.

It monitors critical parameters including:

- Heart Rate
- Respiratory Rate
- Non-contact Blood Pressure (NcBP)
- Movement & Restlessness
- Smart Early Warning Score (D-EWS) Trends

This ensures near-ICU level surveillance in a ward setting without the discomfort of wires or probes for the patient.

The RPM and EWS by Dozee enable healthcare workers to remotely monitor essential parameters including heart rate, respiration rate, blood pressure, SPO levels, temperature, and ECG.

The EWS tracks vital parameter trends, providing healthcare providers with alerts for early detection of clinical deterioration, facilitating timely medical intervention.

"Our strategic partnership with Dozee is a bold step towards establishing unparalleled benchmarks in patient safety. Mangalore can now expect a new era where technology harmonises with compassionate care."

- Dr Prashanth Marla

''Our 'Made-in-India' technology is not just a solution; it's a commitment to excellence, a force majeure in reshaping patient monitoring."

***- Mudit Dandwate,** CEO and cofounder of Dozee*

DOZEE FOR NURSING EXCELLENCE

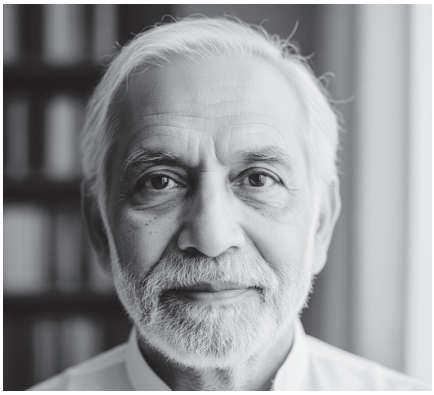
Why Dozee Matters in Modern Nursing

Nurses are at the heart of patient safety. National studies highlight that nurses perform more than 70 tasks every hour and often work 12-

hour shifts on average, frequently in high-pressure settings. This increases the risk of delayed detection of deterioration, especially during night shifts where monitoring gaps are common.

Dozee bridges this gap by offering continuous, contactless monitoring, ensuring patients remain under real-time observation even when clinical teams are attending to multiple responsibilities.

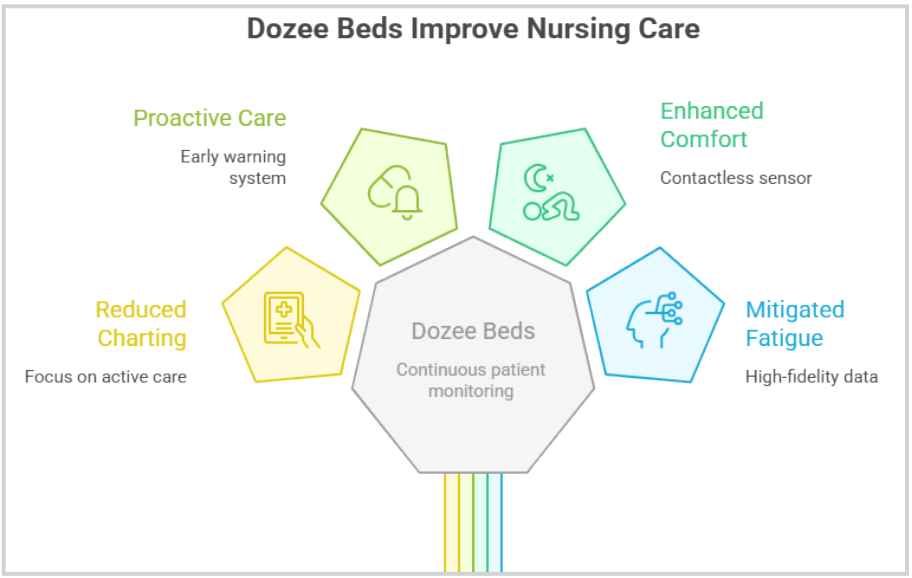
A case example from the Dozee report illustrates how continuous monitoring detected Atrial Fibrillation in an 87-year-old LRTI patient, enabling timely cardiology referral and preventing major complications.



Enhancing Nursing Efficiency and Care Quality

Monitoring challenges are highest at night, with studies showing that nearly double the incidents occur during night shifts and when patients are unmonitored between manual rounds. Dozee's AI-based smart alerts notify the nursing team of even the slightest deviation in vitals well before clinical symptoms appear. Research shows that many deteriorating patients received alerts before worsening.

Since integrating Dozee into wards, response times to clinical alerts have significantly reduced, nurses report



higher efficiency and proactive involvement, physicians value the trend-based clinical insights, step-down units and post-operative wards have seen measurable safety improvements, and documentation accuracy has improved through automated data capture.

A CULTURE OF INNOVATION

Dozee beds have revolutionised Nursing Care. Nurses can view multiple patient vitals from a single dashboard, reducing manual workload and saving time, especially during high-acuity periods. Continuous monitoring and visible trends help enhance communication with families, fostering trust in the care system.

Moreover, Dozee's integrated scoring system (D-EWS) transforms early warning management as it is auto-generated every hour. It replaces manual MEWS/NEWS in eligible areas and helps identify rising trends through Alert Counts (AC). AC higher than 10 is proven to indicate higher risk. This analytical support strengthens the nursing team's ability to intervene early and accurately.

A Culture of Innovation in Nursing

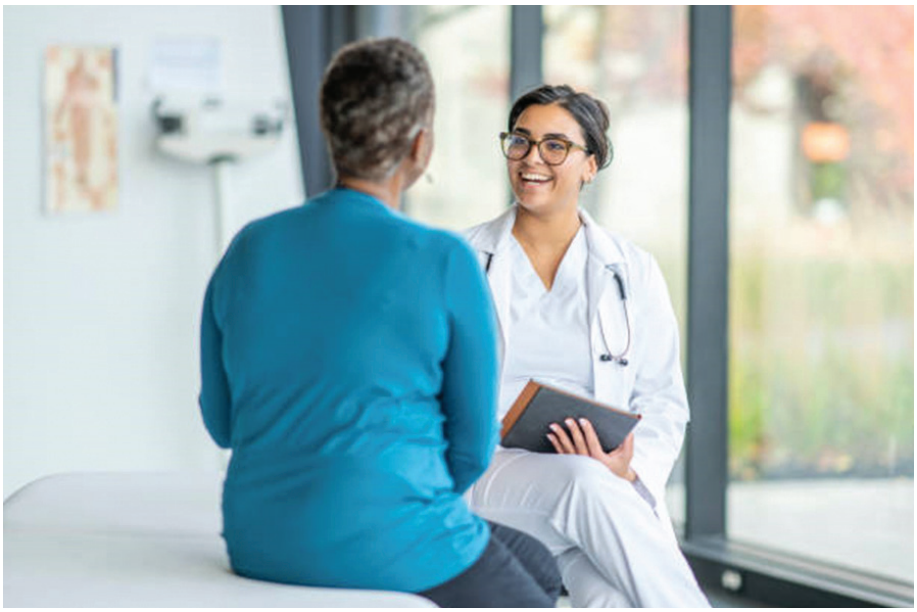
The adoption of Dozee is more than a technological upgrade it represents our continuous pursuit of safer care, a culture of accountability, accuracy, and proactive monitoring as well as a commitment to reduce adverse events in general wards.

Dozee aligns seamlessly with our mission of delivering patient-centred, high-quality healthcare, and the nursing fraternity stands at the forefront of this transformation

By integrating AI-driven continuous monitoring, we are empowering our nurses to deliver timelier, precise, and efficient care ultimately improving outcomes and enriching the patient experience.

''With Dozee, AJ Hospital has taken a confident step towards the future of nursing and patient safety. As the Nursing Superintendent, I extend my heartfelt appreciation to our entire nursing team for embracing this innovation with dedication and responsibility. Together, we continue to advance toward a safer, smarter, and more compassionate healthcare environment. ''

- Mrs. Felcy Pereira



INTEGRATING PROM & PREM INTO HOSPITAL QUALITY IMPROVEMENT PROCESSES

Dr. Swati Rai, Chief Manager Operations, AJHRC

If you've never heard of PROMs and PREMs, these are two key, patient-centred measurement approaches, widely used in healthcare quality assessment, accreditation (including NABH), and health services research.

Clinical outcomes on their own do not fully define whether treatment has been successful. They describe what happened medically, but do not always reflect how patients actually felt during their care or how they coped after being discharged.

Understanding treatment success would also require listening to patients post discharge and valuing their lived experience.

This is where PROMs (Patient-Reported Outcome Measures) and PREMs (Patient-Reported Experience Measures) come in. The enhanced attention on structured tools- reflect a worldwide transition towards patient-centered care and is strongly associated with patient and family engagement in healthcare.

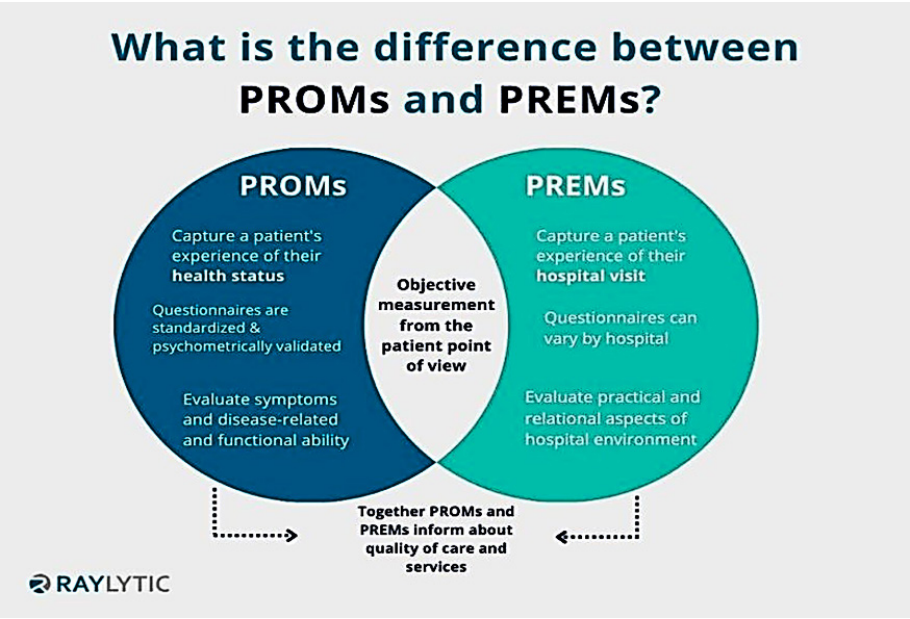
PROMs – Patient-Reported Outcome Measures

- Definition:
- PROMs capture the patient's perspective on their health status, symptoms, functioning, and quality of life after receiving care or an intervention.
- Focus: "Did the treatment improve my health?"
- What PROMs Measure
- Symptom severity (pain, breathlessness, fatigue)
- Functional status (mobility, daily activities)
- Mental and emotional well-being
- Health-related quality of life (HRQoL)
- Examples
- EQ-5D – General health-related quality of life
- SF-12 / SF-36 – Physical and mental health functioning

- PROMIS – Patient-Reported Outcomes Measurement Information System
- Oxford Hip Score / Knee Score – Orthopaedic outcomes
- PHQ-9 – Depression outcomes
- EORTC QLQ-C30 – Cancer-related quality of life
- Use in Hospitals
- Clinical outcome evaluation
- Comparing effectiveness of treatments
- Value-based healthcare
- Post-discharge follow-up
- Research and audits

PREMs – Patient-Reported Experience Measures

- Definition:
- PREMs capture the patient's experience of the care process, rather than health outcomes.
- Focus: "How was my experience while receiving care?"
- What PREMs Measure
- Communication with doctors and nurses
- Respect, dignity, and empathy
- Waiting times
- Cleanliness and environment
- Information provided
- Involvement in decision-making
- Examples
- HCAHPS (Hospital Consumer Assessment of Healthcare Providers and Systems)
- NHS Inpatient Survey
- Picker Patient Experience Questionnaire
- Custom hospital experience surveys



- Use in Hospitals
- Service quality improvement
- Accreditation (NABH, JCI)
- Patient satisfaction benchmarking
- Staff training and process redesign

PROM vs PREM

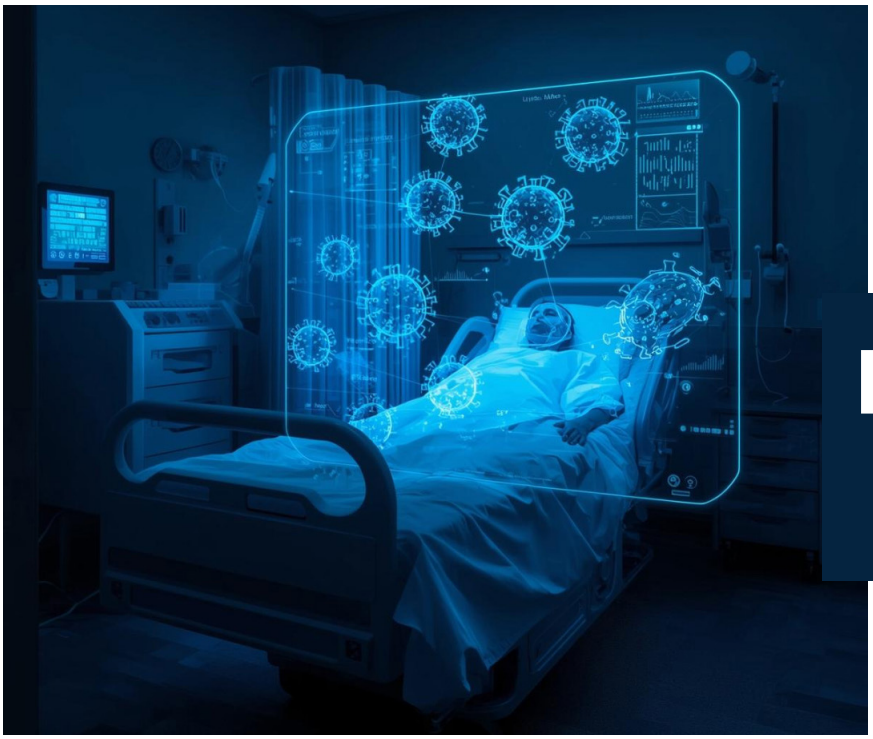
One of the main challenges with PREMs is getting useful, honest feedback without overwhelming patients with long or complex questionnaires.

To help address this, the AHRQ CAHPS Program is working to simplify surveys, offer optional sections, and use friendlier formats such as web-based surveys. They are also using newer techniques like natural language processing to better interpret patients' written comments and open-ended feedback.

PROMs + PREMs Together = Value-Based Care

By systematically collecting PROM and PREM responses, healthcare providers gain deeper insights on continuity of care that support better patient-centred care clinical decisions and planned follow up scheduling. These tools both generic and disease specific can quantitatively and qualitatively measure patient's responses and outcome of care.

PROMs tell us whether treatment worked; PREMs tell us how care was delivered. Using both therefore provides a holistic view of healthcare quality.



PATIENT SAFETY

INFECTION PREVENTION A SHARED RESPONSIBILITY

Mrs. Jesna Joseph, Infection Prevention Nurse, AJHRC

In the bustling corridors of our hospital, where care and compassion meet cutting-edge medicine, lies a silent yet formidable adversary: hospital-acquired infections (HAIs).

The unseen battle against infection is always at the forefront of our mission. These infections, which patients can contract during their stay in a healthcare facility, usually within 48 hours of admission, pose a significant threat to health outcomes and can lead to prolonged hospitalisations, increased healthcare costs, and even mortality. As we continue to prioritise the health and safety of our patients, understanding infection control has never been more vital.

In this article, we'll shed light on the critical measures our dedicated staff employs to combat infections, the role we play in this ongoing effort, and the techniques we're implementing to safeguard our community.

Infection prevention is a cornerstone of patient safety and quality healthcare. Healthcare-associated infections (HAIs) continue to pose significant challenges worldwide, leading to prolonged hospital stays, increased healthcare costs, and preventable morbidity and mortality.

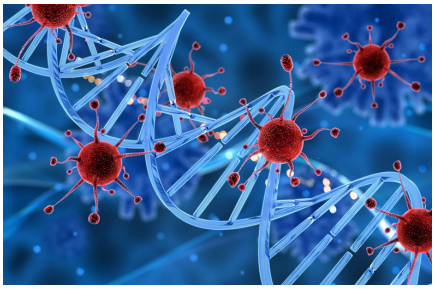
Every year, hundreds of thousands experience hospital-acquired infections an alarming statistic that underscores the importance

of diligence and education in our healthcare protocols. In India, with its diverse population and rapidly advancing healthcare landscape, tackling HAIs has become a critical priority.

A recent study revealed that the incidence of HAIs in Indian hospitals ranges between 5% and 17%, with urinary tract infections, surgical site infections, and bloodstream infections being the most prevalent. Factors such as crowded hospital environments, antibiotic resistance, and variations in hygiene practices compound the risk, making infection

control a multi-layered challenge.

The COVID-19 pandemic has intensified the importance of infection control like never before. As we faced unprecedented challenges, our understanding of pathogens and transmission dynamics evolved rapidly, highlighting the urgent need for stringent protocols.



This reality has not only reshaped our approach to preventing hospital-acquired infections but also reinforced our commitment to protecting every patient who walks through our doors.

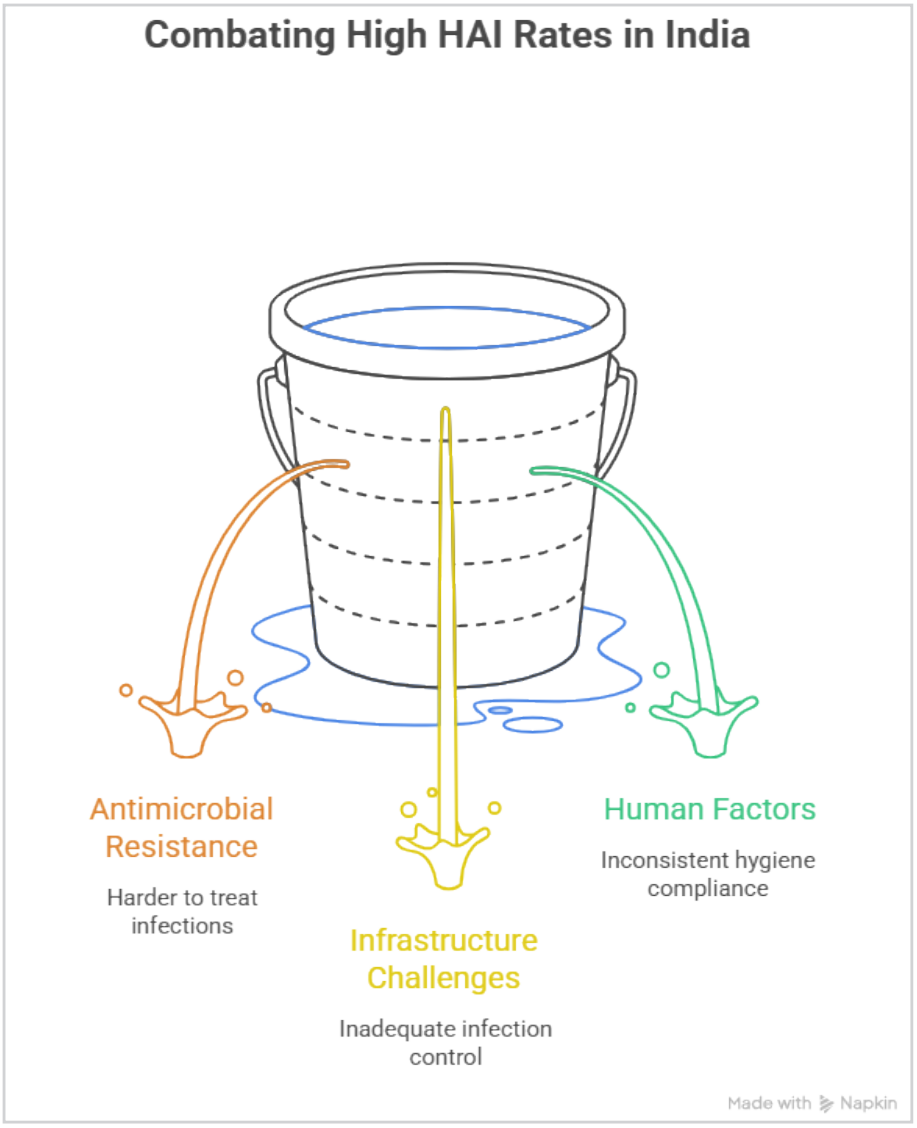
HAI - UNDERSTANDING THE RISKS

Several factors contribute to the high rates of HAIs in India:

- **Antimicrobial Resistance:** The overuse and misuse of antibiotics have led to a surge in resistant strains of bacteria. This makes even common infections harder to treat and control, heightening the stakes for hospital patients
- **Infrastructure Challenges:** Many healthcare facilities struggle with inadequate infrastructure, including insufficient isolation rooms and poor waste management systems, which are crucial for a robust infection control program.
- Human Factors: Compliance with hygiene protocols and hand hygiene among healthcare workers can vary significantly, influenced by workload, training, and organisational culture.

Strategies for Control and Prevention

Stringent Hand Hygiene Protocols: Hand hygiene remains the single most effective measure to prevent infections. Simple actions such as washing hands with soap and water or using alcohol-based hand rubs at the right moments can drastically reduce the transmission of pathogens. Educating staff on the importance of hand hygiene is foundational. Adherence to the World Health Organisation's "Five Moments for Hand Hygiene" framework guides healthcare workers on when and how to effectively clean their hands,



a requisite in all healthcare settings.

Personal Protective Equipment: The appropriate use of personal protective equipment (PPE), including gloves, masks, gowns, and eye protection, further reduces the risk of cross-transmission. PPE must be used judiciously and correctly, along with proper donning and doffing techniques, to ensure maximum protection.

Antibiotic Stewardship Programs:

Antimicrobial stewardship is another key pillar of infection prevention. Rational use of antibiotics helps combat antimicrobial resistance, ensuring that life-saving drugs remain effective for future generations. This initiative aims to reduce the incidence of antibiotic-resistant infections and to regulate and monitor antibiotic use.

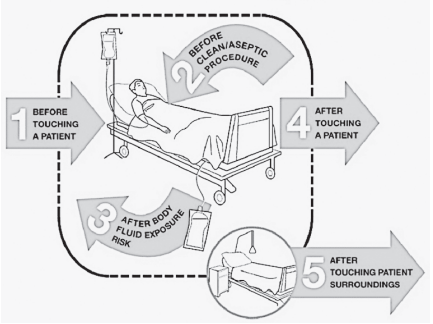
Sterilisation and disinfection: Environmental cleaning and disinfection play a vital role in breaking the chain of infection. Regular cleaning of high-touch surfaces, medical equipment, and patient care areas helps minimise the spread of infectious agents.

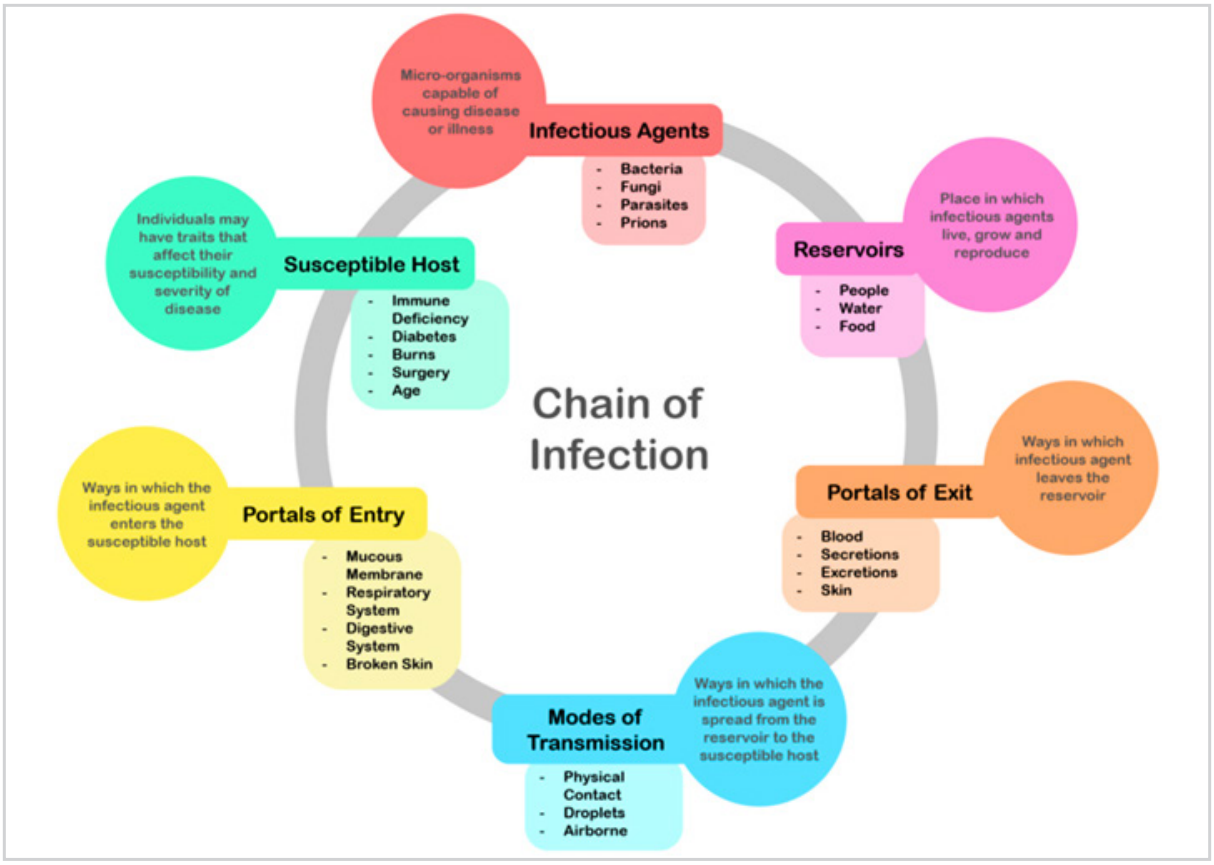
Enhanced Surveillance: Keeping track of infection rates through rigorous surveillance enables hospitals to identify outbreaks early and implement targeted interventions swiftly. This proactive approach is crucial for managing patient safety.

A Collective Responsibility

Infection prevention is not the responsibility of one department alone it requires commitment, awareness, and teamwork from all healthcare professionals. By consistently following standard precautions and evidence-based practices, we can create safer healthcare environments and protect lives. Building partnerships with local health authorities and engaging with the public through awareness campaigns is essential.

By prioritising patient safety and fostering a culture of hygiene and responsibility, we can turn the tide on HAIs, ensuring that every patient receives the safe and compassionate care they deserve. Together, we are not just fighting infections; we are building a healthier future for all.




Chain of Infection
Infectious Agents
Micro-organisms capable of causing disease or illness
- Bacteria
- Fungi
- Parasites
- Prions
Reservoirs
Place in which infectious agents live, grow and reproduce
- People
- Water
- Food
Portals of Exit
Ways in which infectious agent leaves the reservoir
- Blood
- Secretions
- Excretions
- Skin
Modes of Transmission
Ways in which the infectious agent is spread from the reservoir to the susceptible host
- Physical Contact
- Droplets
- Airborne
Portals of Entry
Ways in which the infectious agent enters the susceptible host
- Mucous Membrane
- Respiratory System
- Digestive System
- Broken Skin
Susceptible Host
Individuals may have traits that affect their susceptibility and severity of disease
- Immune Deficiency
- Diabetes
- Burns
- Surgery
- Age


Hospital Acquired Infections
01
Catheter-Associated Urinary Tract Infections
02
Central Line-Associated Bloodstream Infections
03
Surgical Site Infections
04
Clostridium Difficile Infections
05
Hospital-Acquired Pneumonia
06
Ventilator-Associated Pneumonia

HIDDEN HEROES

THE MAINTENANCE DEPARTMENT

Spotlight on The Engineering Services:

The Unsung Heroes of Healthcare

Tucked away discretely in the back of the hospital, on the ground floor of the AJHRC building, a non-descript, often overlooked department sits as the hospital's quiet backbone, ensuring that the environment of care is safe, reliable, and always ready. Even as lifesaving gases bubble their way to patients and scalding steam does its magic destroying bacteria on soiled surgical equipment, we have much to thank the Maintenance team for.

Read on as we dive into the marvelous world of our engineering experts and discover how their innovative solutions and unwavering commitment play a pivotal role in enhancing patient experiences every day!

Behind every successful surgery, every comfortable patient room, and every life-saving moment at AJHRC, there's a dedicated team working tirelessly behind the scenes: the Engineering Services department also known as the Maintenance department.

The skilled professionals working here ensure that our facilities are not only safe and efficient but also equipped with the latest technology to support top-notch patient care. From maintaining vital medical equipment to optimising infrastructure, their contributions are essential in creating an environment where health thrives.

While clinicians focus on healing patients, the Maintenance team

The Maintenance department- they may not wear scrubs or carry stethoscopes, but without them, modern healthcare simply cannot function.

makes sure the hospital itself never falls ill. From the strength of the hospital walls to the hum of a backup generator at midnight, this department keeps everything running smoothly across multiple disciplines.

At its core, the Maintenance Department exists to provide an uninterrupted, hazard-free environ ment where patient care can happen without compromise. This means constant planning, meticulous preventive maintenance, and rapid emergency response often before anyone even notices a problem.

Headed by Mr Harshendra Shetty, the department manages power from the main grid, generators, UPS systems, and safe internal distri bution, ensuring that even during outages, critical care never stops.

The team maintains the hospital's physical infrastructure buildings, internal roads, parking areas, and surrounding spaces ensuring a clean, safe, and functional environment for patients, visitors, and staff. From drinking water to emergency reserves, purification systems, storage, drainage, and sewage, the department safeguards one of the most essential resources for patient safety and infection control. Heating, Ventilation, and Air Conditioning (HVAC) systems are carefully maintained to control air quality, temperature, humidity, and pressure especially in sensitive areas such as operating theatres, ICUs, laboratories, and isolation rooms, where infection control is non-negotiable.

Oxygen, compressed air, nitrous oxide, and vacuum systems are silently delivered through complex pipelines, monitored and maintained to ensure uninterrupted support for clinical care. Steam supply systems power sterilisation processes in the Central Sterile Supply Department (CSSD) and hospital laundry are critical for infection prevention and patient safety.

From acquisition and acceptance testing to preventive and breakdown maintenance, the department oversees essential equipment such as generators, air-conditioning plants, elevators, and lifts—often responding instantly when failures occur. Fire detection and firefighting systems, lightning protection, biomedical and hazardous waste management, as well as strict adherence to national and international regulatory standards, all fall under the department's watchful eye.

Why the Maintenance Department Matters More Than You Think.

The efficiency of the entire hospital depends on the Maintenance department. A momentary power failure, a malfunctioning air-handling unit, or a broken elevator can quickly escalate into a patient safety risk. That's why this department works closely with clinicians and hospital leadership anticipating problems, preventing breakdowns, and ensuring the healthcare environment supports healing at every level.

The Maintenance Services Department doesn't just look after buildings and machines it sustains life, silently and relentlessly, every single day.

Photos Courtesy of Mrs Shraddha Rai, Marketing Department

PATIENT VOICE

WITH ASHOK SHENOY

An Interview By Customer Relations Officer, Sanmathi Menda

We decided to capture what our patients think and how they felt as they came through our doors. We asked them this and other questions. Talking to Customer Relations Officer, Mrs Sanmathi Menda, Mr Ashok Padavu Shenoy shared his thoughts on his experiences as a patient at AJHRC. Here's an excerpt from the interview:

What brought you to our hospital Mr Shenoy?

A I came to know about the A J Hospital since the beginning of 2010. Many of my doctors who treat me are here. So both these reasons made me approach A J Hospital for my healthcare needs.

How would you describe your experience with the doctors and nurses at this hospital?

A My experience has been very good with the doctors and in the OPD also. Nurse treatment is also quite good.

How satisfied are you with the facilities and services offered at AJHRC?

A So far I have undergone two surgeries at AJ Hospital. One under Cardiology and another under General Surgery specialties. Facilities and treatment are good.

Have you faced any challenges or difficulties as a patient at the hospital?

A After my operation under General Surgery last June 2025, post my discharge I suffered from an abscess, internal pain & burning sensation. But this was treated very well by Dr Varshitha. So I am thankful to Varshitha madam for curing my health issues.

What did you appreciate the most during your treatment?

A A good thing is that our queries are attended to and follow-up actions are taken immediately.

Personal Story

My cardiologist Dr B.V. Manjunath is very good. Sir has supported me with my health since the last twenty years, with regular and useful health tips to look after myself. The ENT doctor, Dr Deepalakshmi Tantry is also very good and has given me valuable guidance since the last 15 years whenever an issue has arisen. Importantly, for all my family members' health needs, I visit A J Hospital as my First and Top choice. I also refer my friends and extended family to the AJ Hospital and Research Centre.

Thankyou

Special Feature

SUSTAINABILITY

Why the Future of Medicine is Green

Mrs. Primrose Vishnu, Associate Prof., AJIHM

The business of healing is environmentally destructive. Healthcare systems worldwide are among the most resource-intensive sectors, contributing an estimated five percent of global carbon emissions and exerting significant pressure on ecological systems. Hospitals consume vast amounts of energy and water, generate substantial waste, and depend heavily on consumables and non-renewable energy sources that carry environmental burdens.

As the global movement towards low-carbon, climate-resilient operations accelerates, healthcare organisations are being urged to align with the United Nations Sustainable Development Goals (SDGs) and national sustainability frameworks to mitigate their ecological footprint.

But a profound shift is underway. Triggered by rising energy costs, clear scientific evidence linking climate change to public health crises, and increasing regulatory pressure, hospital leadership worldwide is recognising that planetary health and human health are inextricable.

We are moving past the era of "greenwashing" where a recycling bin in the cafeteria passed for sustainability. We are entering an era of systemic operational redesign where ecological restoration is central to the clinical mission.

Hospitals burn fossil fuels 24/7 to maintain precise temperatures and sterilise equipment. They generate mountains of single-use plastic waste and release potent anesthetic gases into the atmosphere.

''Sustainability is the ability to meet present needs without compromising the capacity of future generations to meet theirs, balancing environmental health, economic vitality, and social equity. It involves managing resources to avoid long-term depletion, ensuring systems can endure indefinitely. Key pillars include environmental protection, economic viability, and social responsibility. ''

WHO

Special Feature

Sustainability: Why the Future of Medicine is Green

Fact Sheet : Indian hospital sector

- Growing at 18.24% CAGR
- More than 5.2% of net global climate emissions
- High energy use: ~ 3 kWh / bed/ day
- 5th largest climate polluter on the planet
- ↑ Heat illness, respiratory & infections
- 7M workers exposed to radiation/ yr
- 1.6M deaths + 45M DALYs (chemical exposure
- Excessive use of disposables and plastics
- 544 of 619 tons/day of biomedical waste treated

Core Pillars of Sustainability

- **Environmental:** Protecting ecosystems, air quality, and biodiversity while using resources no faster than they can be replenished.
- **Economic:** Promoting business and economic practices that allow for long-term growth without damaging environmental or social foundations
- **Social:** Ensuring equity, health, and well-being for communities, which includes upholding human rights and fair labour practices.

Too many organisations consider going "green," a cost item on a balance sheet. They don't know or appreciate that environmental programs can be investments that pay dividends. For example, even the simple act of replacing fluorescent lightbulbs with LEDs in a building can reap high financial rewards.

The Hospital as a Living Organism

The most visible manifestation of this shift is in infrastructure. The hospital of the future, as visualised in recent architectural concepts emerging from Europe and Asia, is no longer a sterile concrete fortress, but a permeable, living organism. "We used to seal patients off from nature to protect them from pathogens," says Dr. Anya Sharma, a leading consultant in regenerative healthcare design. "Now we realise we sealed them off from healing."

Leading institutions are adopting what is known as "biophilic design" on a massive scale. As depicted in emerging facility designs, sterile lobbies are being replaced by atriums flooded with natural light and multi-story living walls. This is not merely aesthetic. Data from the Center for Health Design has long indicated that access to nature even visually can lower patient blood pressure, reduce the need for pain medication, and shorten hospital stays by an average of 8.5%. The green wall is now a clinical tool.

Hospitals are among the most energy-dense commercial buildings, often consuming two and a half times the energy of an equivalently sized office building. To combat this, forward-thinking facilities are utilising every square meter of real estate for generation. The concept

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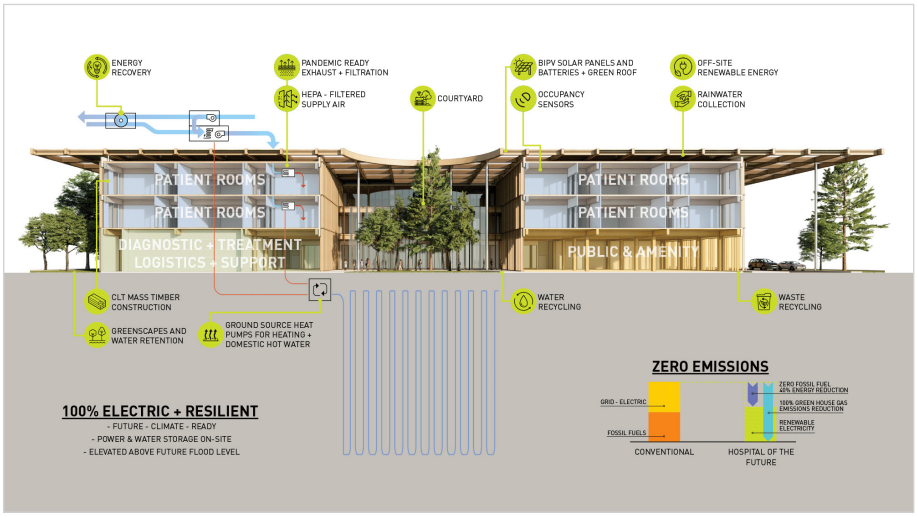
Sustainability: Why the Future of Medicine is Green

of the "passive hospital" is gaining traction. As illustrated in current sustainable design models, vast rooftop expanses are no longer barren spaces for HVAC units. They are being converted into extensive solar farms and agricultural hubs.

Rooftop greenhouses, warmed by the building's waste heat, are being used to grow organic produce for the hospital cafeteria slashing the food supply chain's carbon footprint while providing therapeutic gardening spaces for long-term patients and stressed staff. Furthermore, the sprawling hospital parking lot traditionally an asphalt heat island is being reimagined. Solar canopies over parking spaces serve a dual purpose: generating megawatts of clean power for the grid and providing shaded charging infrastructure for a rapidly electrifying fleet of ambulances and logistics vehicles.

The Invisible Footprint: Supply Chain and Waste

Roughly 70% of healthcare's emissions fall under the category- indirect emissions from the production, transport, and disposal of goods, like MRI machines to nitrile gloves. "You cannot run a green hospital on a grey supply chain," argues Thomas Reid, director of operations for a major Nordic hospital network that recently committed to net-zero by 2040.



This requires a radical rethink of procurement and waste. Hospitals produce roughly 29 pounds of waste per staff bed, per day. The new gold standard involves aggressive circular economy principles: prioritising reusable textiles over disposables, reprocessing single-use medical devices (a market projected to reach $3.5 billion by 2028), and installing sophisticated on-site composting and recycling sorting facilities, far beyond basic municipal recycling.

The New Standard of Care

The upfront capital costs for retrofitting aging infrastructure are immense, and the regulatory environment governing medical waste is notoriously rigid. However, the cost of inaction is becoming untenable. Volatile energy markets expose hospitals to financial risk, while climate-driven disasters heatwaves, floods, and superstorms are actively threatening hospital resilience and creating new waves of patients.

"Everything we do must be with a strong focus on building more equal, inclusive and sustainable economies and societies that are more resilient in the face of pandemics, climate change, and the many other global challenges we face."

António Guterres
United Nations Secretary-General

The 2030 Agenda for Sustainable Development is an action plan for the next few years that focuses on the Triple Bottom Line (TBL) of people, planet, and prosperity. Adopted by the United Nations in 2015, this isn't just a "green" initiative it is a

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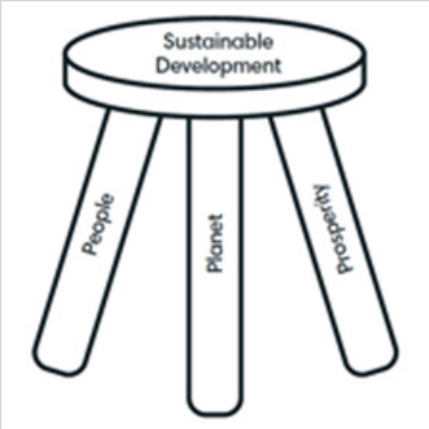
Sustainability: Why the Future of Medicine is Green

The Sustainable Development Goals (SDGs), also known as the Global Goals, adopted by the United Nations in 2015

comprehensive blueprint for human and planetary health. While Goal 3 (Good Health and Well-being) is the primary focus, the agenda treats healthcare and hospitals as



Adopting TBL can help propel us into an era of economic prosperity, social responsibility, and environmental sustainability.

the bedrock of a stable, prosperous society.

Sustainability in healthcare is no longer a niche interest for the eco-conscious administrator. It is rapidly becoming a key indicator of institutional quality, financial stewardship, and clinical excellence. The hospital that harms the environment in the process of healing the patient is becoming a relic of the past.

So green is good; it's just not good enough. Being sustainable is much more than the reduction of our carbon footprint, which is why there are 17 Sustainable Development Goals (SDGs) within the United Nations 2030 Agenda, not just one.

The Direct Mandate: SDG 3 (Good Health & Well-being)

This is the primary driver for healthcare systems. It sets specific targets that hospitals and national health policies are tasked with meeting by 2030:

- Universal Health Coverage (UHC): Ensuring everyone can access quality services without financial hardship
- Maternal & Child Health: Reducing global maternal mortality to less than 70 per 100,000 live births and ending preventable deaths of newborns.
- Disease Control: Ending the epidemics of AIDS, tuberculosis, and malaria, while reducing premature mortality from non-communicable diseases (NCDs) like cancer and diabetes by one-third.
- Mental Health: Promoting mental health as a core component of the "well-being" mandate.

Hospitals as "Green" Hubs (Operational Sustainability)

To align with the 2030 Agenda (specifically Goals 7, 12, and 13), modern healthcare facilities are shifting toward:

Decarbonisation: Transitioning to renewable energy (solar/wind) to power medical equipment and HVAC systems.

Waste Management: Reducing single-use plastics and implementing strict protocols for hazardous and pharmaceutical waste disposal to protect local water systems (Goal 6).

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Sustainability: Why the Future of Medicine is Green

- Sustainable Procurement: Choosing suppliers with low carbon footprints and ethically sourced materials.

The "Social Determinants" Connection

Healthcare systems are increasingly addressing other SDGs to improve patient outcomes:

- SDG 1 & 2 (No Poverty/Zero Hunger): Hospitals often act as social hubs, screening patients for food insecurity or financial distress which directly impacts their recovery.
- SDG 5 (Gender Equality): Ensuring equitable access to reproductive healthcare and addressing the gender pay gap within the healthcare workforce (nursing, for example, is a female-dominated field that is often

under-resourced).

Sustainability means much more than being green.

- SDG 11 (Sustainable Cities): Telemedicine reduces the need for patient travel, lowering urban traffic congestion and carbon emissions.

Resilience and Technology

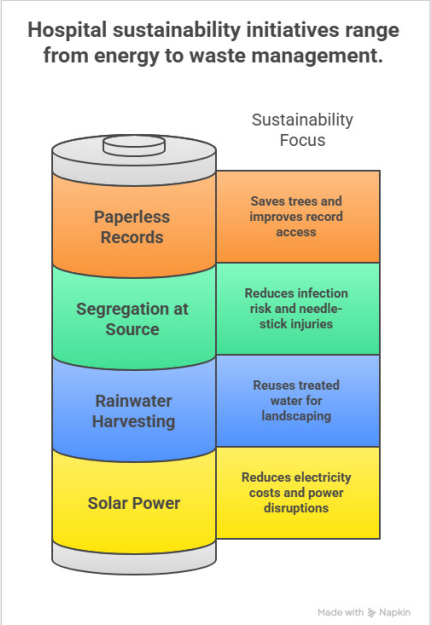
The 2030 Agenda emphasizes building resilient infrastructure (Goal 9). For hospitals, this means:

- Digital Transformation (DX): Using Electronic Health Records (EHR) and AI to improve diagnostic accuracy and reduce paper waste.
- Emergency Preparedness: Strengthening the ability to handle global health risks (like future pandemics or climate-related disasters) through better early warning systems.

Indian Hospitals

Indian medical institutions are quietly pioneering practices that could redefine what it means to "do no harm." Healthcare systems are among the most resource-intensive human enterprises. Operating 24/7, hospitals demand massive amounts of energy, water, and materials, generating large volumes of waste including hazardous biomedical waste in the process.

In India, the hospital industry is expanding at an unprecedented rate, with a compound annual growth rate of over 18 percent. This rapid growth amplifies the sector's responsibility to address environmental degradation



and adopt structured sustainability practices.

Recognising this need, the National Accreditation Board for Hospitals and Healthcare Providers (NABH) released its Guidebook for Climate Action and Sustainability in Healthcare (2024), the first national framework integrating climate resilience and sustainability within hospital governance, infrastructure, and operations.

Despite the availability of such guidelines, a considerable "sustainability gap" persists: many institutions initiate isolated green projects but lack a systematic approach to assess, implement, and

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institutionalise sustainability at an organisational level.

From Sunlight to Savings Clean Energy in Care

Perhaps the most visible shift is in renewable energy adoption.

In Karnataka, under the state's Saura Swasthya initiative, nearly 3,500 government health facilities from sub-centres to taluk hospitals have been equipped with solar power installations, reducing electricity bills by up to 80%. Over the next decade, this shift is projected to save Rs 100 crore and prevent nearly 2 lakh tonnes of CO_2 emissions while securing reliable power in rural areas.

By blending innovation with ecology, Indian hospitals are quietly rewriting the future of healthcare proving that sustainability and superior care need not be competing priorities.

At flagship institutions like All India Institute of Medical Sciences (AIIMS), New Delhi, digital and energy management systems including rooftop solar arrays and ICT-enabled energy optimisation have driven up to 30% energy savings in internal

power use, while improving indoor air quality and operational reliability.

Private hospital groups are also aligning with the sustainability imperative. IHH Healthcare's network, which includes Fortis and

Gleneagles hospitals, reports sizable advances: waste diversion from landfills above 95%, reduction of single-use plastics, increased use of renewable energy, and better water and waste management targets part of a roadmap toward Net-Zero emissions by 2050.

Water, Waste, and the Invisible Ecology of Healing

Hospitals are heavy water consumers for sanitation, cooling systems, kitchens, and sterilisation. Sustainable facilities are increasingly turning to rainwater harvesting, recycled wastewater, and low-flow fixtures to cut consumption without compromising care quality. A notable example from India is Sir Ganga Ram Hospital, which has implemented a zero-discharge wastewater system for non-potable reuse.

Biomedical and general waste remains a persistent challenge. Green hospital frameworks emphasize the "4R's" Reduce, Reuse, Recycle, Renewables encouraging institutions to segregate waste at source and partner with certified recyclers to diminish landfill and incineration burden. Hospitals like those in the HELP network (Health Care Environment League of Practitioners) are facilitating knowledge exchange on waste

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management and sustainable procurement to mainstream these practices nationwide.

In Belagavi, KLES Dr Prabhakar Kore Hospital became one of Karnataka's first fully paperless hospitals, saving an estimated 10–12.5 million pages annually the ecological equivalent of preserving 1,250–1,500 trees each year. The digital transformation also enhances clinical accuracy and operational efficiency while reducing logistical waste tied to paper records.

This emerging consensus that a hospital's mission extends beyond its patients to the environment that shapes community health is reshaping how healthcare is delivered across the country.

Sustainably designed hospital buildings offer benefits that go well beyond environmental metrics. Efficient HVAC systems, better insulation, natural light, and water-wise design improve patient comfort, clinical outcomes, and staff productivity. Kauvery Hospital, Trichy, has been recognized with a LEED Silver certification for its eco-friendly infrastructure a milestone in Indian healthcare's green building landscape.

India's IGBC Green Healthcare Facilities Rating has also seen hospitals like Kalaignar Centenary Super Specialty Hospital achieve Gold status, demonstrating that

environmental responsibility and high clinical standards can go hand in hand.

Why Sustainability Matters in Healthcare

Doctors and environmentalists alike now view sustainability not as an add-on, but as a core component of health outcomes. Climate change including air pollution, heatwaves, and vector-borne diseases is increasing the disease burden on communities and healthcare systems alike. Hospitals, therefore, bear a moral imperative to limit their contribution to these health risks even as they treat them. Challenges remain. Hospitals operate 24/7 with critical energy and sanitation needs, making sustainability a complex balancing act.

High initial costs, infrastructure limitations, and regulatory bottlenecks can slow adoption.

The World Bank warns that climate change could push an additional 100 million people into poverty by 2030, However, hospitals that implement green initiatives often enjoy lower operational costs, improved staff morale, and enhanced patient trust.

To build climate-resilient health systems, healthcare leaders must:

- Set clear sustainability goals and KPIs.
- Integrate climate risk assessments into hospital planning.
- Foster international collaboration to share best practices and technologies.
- Invest in staff training on sustainable practices from waste segregation to energy conservation.

- Encourage climate-smart healthcare financing with incentives for green upgrades.
- Focus on social sustainability, access and equity.

In conclusion, whether in a rural clinic in Bangladesh or a corporate hospital in New York, the mission remains the same: healing people without harming the planet. Primum non nocere at first do no harm. Sustainable healthcare isn't just a strategy it's ensuring the survival of human kind.

The future belongs to those who understand that the ultimate preventative medicine is a healthy planet.

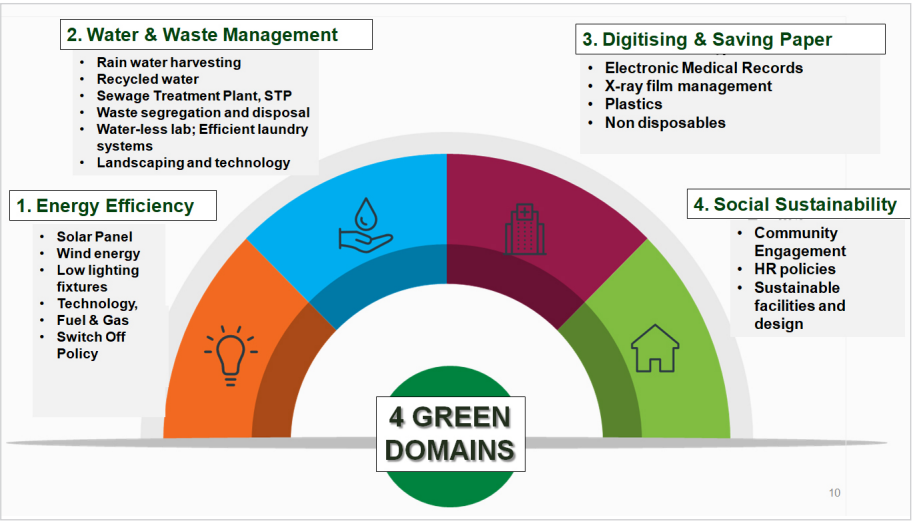
How AJHRC has embraced the Green Revolution

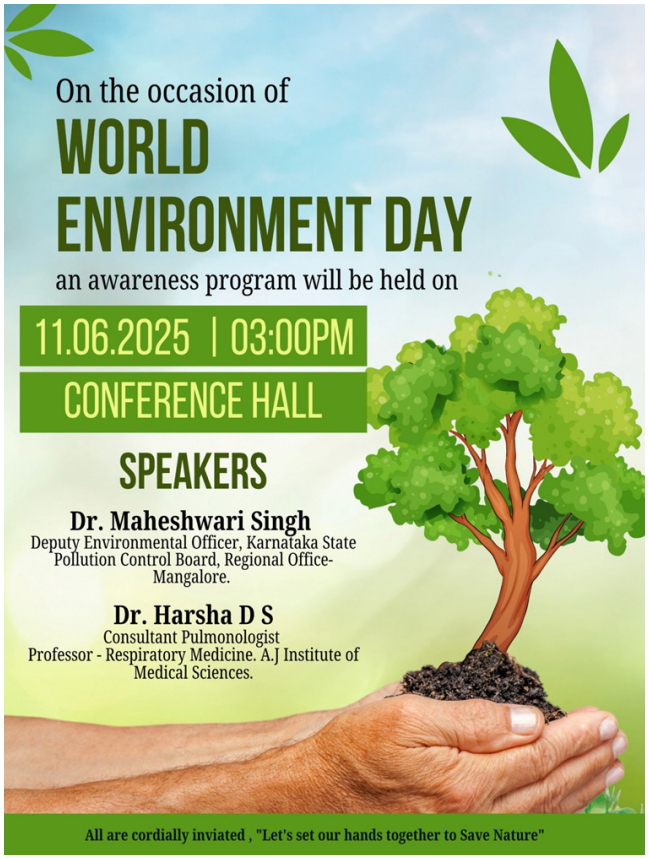
The AJ Hospital and Research Centre has made a radical shift from traditional operations, which were largely fossil fuel dependent, environmentally costly, resource hungry to implementing greener operations in line with the UN SDGs and NABH sustainability criteria. The aim is to enhance patient and worker health benefits, procure energy and cost savings; save natural resources; reduce our carbon footprint and mitigate climate risks; build social capital and create healthy, sustainable communities. Best practices and green initiatives are evident in four major domains as follows:

- Energy Efficiency (SDGs 7, 9, 12 & 13)
- Waste Management & Water Conservation (SDGs 6 & 12)
- Saving Paper Resources & Digitisation (SDGs 9, 12) and
- Social Sustainability through Community Engagement Initiatives (SDGs 3, 10, 17).

In keeping with the circular economy model, the hospital uses renewable energy and harvests rainwater. It is designed with open spaces and natural lighting. Recycled water is used for flushing lines and for gardening. An in-house rooftop solar power plant is used to generate green energy, while wind energy is wheeled from Belgaum. Savings have been reaped through replacing incandescent bulbs with LED lighting. Moreover, environmentally friendly, green chemicals are used in the laundry and housekeeping areas. Dry lab technology and onsite sewage treatment plant save water. Social sustainability practices are embedded in policy and corporate social responsibility initiatives like the monthly Vriddhi elderly engagement programme. Further a corporate Green Team has been formed to institutionalise sustainability and monitor progress. Recognising these stellar efforts AJHRC has earned two national awards in the last year:

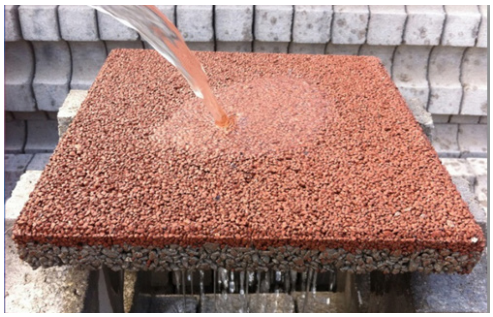
- **Gold Recognition in the CII National Excellence Practice Competition – Leveraging Quality Tools for Improving Sustainable Practice, held in June 2025.**
- **And 2nd runner-up position in the IMC Ramkrishna Bajaj National Quality - Make Quality Happen Best Practices Competition, held in Nov 2025.**





IN PICS: AJHRC GOES GREEN, SAVING WATER & ENERGY

AJHRC LEADS SUSTAINABILITY & WINS AWARDS



SOCIAL & GREEN INITIATIVES: DO YOU KNOW THEM?

Integrating Patient Safety and Quality Assurance in Healthcare Education

Dr. Vijaya P, Principal & Professor, AJIHM

Healthcare is in the midst of a quiet but profound shift—from treating diseases to caring for people. At the heart of this transformation lies a renewed focus on patient safety, quality, and dignity.

Paradoxically, despite advances in medicine, preventable harm remains a leading cause of morbidity and mortality worldwide. Patient Safety and Quality Assurance (PSQA) are therefore no longer specialist concerns or administrative checklists; they are essential clinical competencies for every healthcare professional.

Decades of evidence show that most errors arise not from individual negligence, but from system failures poor communication, fragmented processes, and inadequate training. Preparing healthcare students with strong PSQA capabilities is not optional; it is fundamental to safe care.

Globally, patient safety education has gained momentum over the past two decades. The World Health Organisation's Multi-Professional Patient Safety Curriculum Guide has set a common language for safety across disciplines. Countries such as the United States, Spain, and Japan have embedded patient safety into accreditation standards, regulatory requirements, and competency-based curricula. The results are clear: early exposure to concepts like error reporting, teamwork, clinical governance, and continuous quality improvement improves professional behaviour and patient outcomes.

India's progress, however, has been uneven. While initiatives such as the National Patient Safety Implementation Framework (2018–

2025) and standards from NABH and JCI signal strong intent, education on PSQA remains fragmented and often overly theoretical. Many graduates understand patient safety in principle but lack hands-on skills in risk identification, root cause analysis, safe communication, and quality improvement skills that are critical in a high-volume, resource-constrained healthcare system.

Graduates lack hands-on skills in risk identification, root cause analysis, safe communication, and quality improvement.

Systematic integration of PSQA into undergraduate and postgraduate training can be transformative. Early training helps shape professional identity, fostering a culture where errors are seen as opportunities for learning rather than blame. Interprofessional PSQA education brings medical, nursing, allied health, and management students together, reflecting the reality that patient safety is a team sport. Competency-based approaches using audits, checklists, standard operating procedures, and simulation bridge the gap between classroom learning and clinical practice.

Faculty development and digital innovation further strengthen this ecosystem. Trained faculty can model safe behaviours and embed safety principles across clinical teaching. E-learning platforms, virtual simulations, and digital incident-reporting systems enable experiential learning even in resource-limited settings, while alignment with national and global frameworks ensures consistency and accountability.

Embedding patient safety and quality assurance into healthcare education is not merely an academic reform; it is a strategic investment in the future of care.

For India, a structured, interdisciplinary, and competency-based PSQA curriculum supported by faculty capacity building, digital tools, and regulatory backing offers a powerful pathway to safer, higher-quality, and truly patient-centred healthcare.

MEDICAL MARVELS

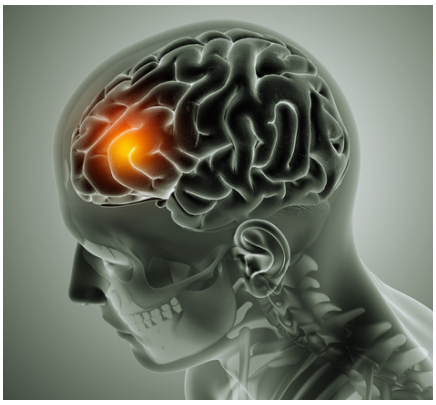
Can an MRI Scan Help Predict Stroke Recovery?

Dr. Priyanka Shridharan, AJHRC

Diffusion-Weighted Imaging (DWI) is an advanced MRI technique that maps the random movement (Brownian motion) of water molecules in tissues, revealing cellular structure and function to diagnose conditions like acute stroke, tumours, and infections much earlier than standard MRI, by showing restricted water movement in high-cellularity areas. It provides functional and micro-structural information, helping differentiate tissues, assess treatment response, and visualise brain white matter tracts (Diffusion Tensor Imaging - DTI).

Stroke affects not just the brain, but the entire care journey of a patient. Beyond saving life, the next crucial question is functional recovery. Advanced MRI techniques are now helping clinicians answer this question much earlier by helping

Diffusion-Weighted MRI supports early decision-making in stroke care



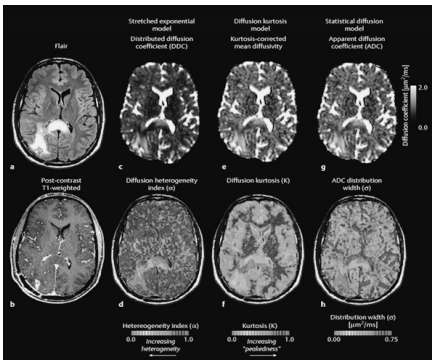
detect stroke damage within hours of onset. Diffusion-Weighted Imaging (DWI) identifies the infarct core, the part of the brain already damaged by stroke.

Research suggests that larger stroke volumes seen on DWI are often linked with poorer functional outcomes. Functional recovery is commonly assessed using the Modified Rankin Scale, which reflects how well a patient can manage daily functions after a stroke independently.

By linking early imaging with functional outcomes, hospitals can plan rehabilitation earlier, improve communication with families, and deliver more coordinated, patient-centered stroke care.

Did you know?

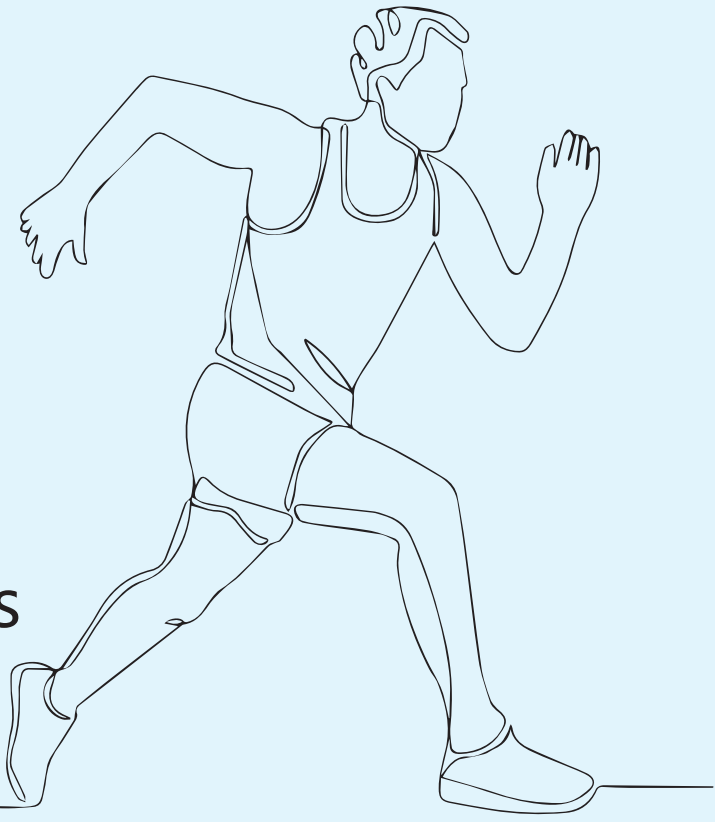
DWI MRI can detect stroke-related brain injury even before symptoms fully evolve, making it one of the most sensitive tools for early stroke assessment.



AJHRC staff headlines

PEOPLE PAGES

- Conferences
- Health days
- Culturals
- Sports
- Awards
- Achievements



PEOPLE PAGES

AJHRC STAFF NEWS & UPDATES

SCRUBS FOR SNEAKERS AT AJHRC SPORTS MEET

The AJ Hospital and Research Centre successfully concluded its 2025 Sports Season, which ran from November 18 to December 7. Inaugurated by Medical Director Dr. Prashanth Marla, the event saw enthusiastic participation from hospital staff in various disciplines, including volleyball, badminton, and tug of war. The season wrapped up with a valedictory ceremony, celebrating a commitment to physical fitness and workplace camaraderie that strengthened the bond across the institution's diverse departments and teams.

SEASON OF GIVING: AJHRC CELEBRATES CHRISTMAS

The spirit of Christmas swept through the campus on December 20, 2025, as staff and students gathered to celebrate the birth of Christ with warmth and festive cheer. Adorned with vibrant decorations, the event featured a blend of cultural activities and music that highlighted the core values of love, gratitude, and goodwill. This celebration of togetherness not only transformed the campus into a joyous space but also strengthened the bonds of the community, leaving participants with lasting memories of seasonal harmony.

YOUNG MINDS, BRIGHT SMILES: A MEMORABLE CHILDREN'S DAY

On November 15, 2025, the campus transformed into a hub of festive joy as AJHRC hosted a vibrant Children's Day celebration for the families of its staff. The day was defined by a series of engaging games and activities that brought out the bright smiles and high energy of the participants. By focusing on nurturing young minds and fostering community happiness, the event concluded as a heartwarming success, leaving both parents and children with lasting memories of play and camaraderie.

TALENT TAKES CENTER STAGE ON ANNUAL DAY

The AJHRC campus buzzed with creativity and spirit during the Annual Day celebrations held on October 18 and 25, 2025. Staff members from across all departments traded their professional roles for the stage, participating in diverse competitions ranging from fine arts to music and dance. These vibrant showcases not only highlighted the hidden talents of the AJHRC community but also fostered a deep sense of teamwork and confidence. The event left staff with a renewed sense of achievement, joy and shared pride.

AJHRC SPORTS MEET

ANNUAL DAY

AJHRC CULTURAL EVENTS

CHILDREN'S DAY

CHRISTMAS CELEBRATIONS

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AJHRC STAFF NEWS & UPDATES

CELEBRATING THE HEART OF AJHRC: MONTHLY EMPLOYEE DAY SUCCESS

To honour the dedication of its workforce, AJHRC continues its successful monthly Employee Day initiative, transforming the workplace into a hub of high energy and appreciation. These gatherings feature a vibrant mix of interactive games, and team-building activities designed to offer a refreshing break from the hospital routine. More than just a celebration, Employee Day serves as a vital platform to recognise the anisation contribution of dedicated staff.

NAVIGATING CHANGE: THE NATIONAL LABOUR REFORM WORKSHOP

On December 20, 2025, Mr. Shashidhar Acharya, General Manager & Chief HR, and Ms. Preethi Salian, Senior HR Executive, represented AJHRC at the "Decoding Labour Codes" workshop held at the Dr. TMA Pai International Convention Centre, Mangaluru.

The intensive session focused on the "New Era of Labour Reforms in India," offering critical insights into evolving compliance requirements and modern HR best practices.

By engaging with these legislative updates, the AJHRC leadership team ensures the institution remains at the forefront of administrative excellence.

DRIVING INNOVATION, AT CAHOTECH 2025

G. Vaman Prabhu, Analytics & Strategy Lead for HR & Administration, represented the organisation at the 10th CAHOTECH 2025 event held at KIIT, Bhubaneswar. Centred on the theme "Technology & Impact: Solving Challenges in Healthcare," the conference provided a high-level platform for exploring analytics and technology-driven solutions.

EMPLOYEE DAY EVENT

EMPLOYEE DAY EVENT

CONFERENCES & WORKSHOPS

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AJHRC STAFF NEWS & UPDATES

KUDLA RUN 2025- HOSTED BY AJHRC AND MANGALORE RUNNER'S CLUB

The event was energised by a popular Reel Competition, where local creators captured the spirit of the race from scenic sunrise jogs to the thunderous cheers of the crowds.

Beyond the physical challenge, the run served as a powerful catalyst for community unity and positivity, reinforcing the importance of an active lifestyle.

On the occasion of World Heart Day, the second Kudla Run 2025 event a collaborative initiative to boost cardiac health by A.J. Hospital & Research Centre and the Mangalore Runners Club, successfully united the city in a vibrant celebration of health and fitness. Over 1,500 runners across different age groups took part.

The run was flagged off by Dr. Prashanth Marla, Managing Director, AJHRC at 6.30 a.m. The runners started their 7K run from the hospital in Kuntikana, down to Infosys in Kottara, across Chilimbi, Lady Hill, Bharath Mall, and Bejai-Kapikad Road, finally looping back to AJHRC.

KUDLA RUN AGAIN!

KUDLA RUN AGAIN!

PEOPLE PAGES

AJHRC STAFF NEWS & UPDATES

RESEARCH GRANT FOR ENDOCRINOLOGY STUDY

A prestigious research grant has been secured for the study "Prevalence of Metabolic dysfunction–associated steatotic liver disease (MASLD), in patients with hypopituitarism" by Dr. Ganesh H.K, Consultant Endocrinologist at AJHRC and the primary Investigator as well as co-investigators Dr. Himamshu Acharya and Dr. Renita Sequeira. The grant is sponsored by the Endocrine Society of India.

AJHRC CHIEF MEDICAL PHYSICIST PRESENTS AT AMPICON 2025

Avin Kumar, Chief Medical Physicist and RSO AJHRC, presented ground breaking work at the 46th Annual Conference of the Association of Medical Physicists of India (AMPICON 2025). Held from December 4 to 6 in Guwahati, the prestigious gathering at the Srimanta Sankardev Kalakshetra Auditorium served as a national stage for advancements in radiation safety and imaging technologies. By contributing to these high-level scientific discussions, AJHRC continues to reinforce its commitment to innovative medical physics solutions in patient care.

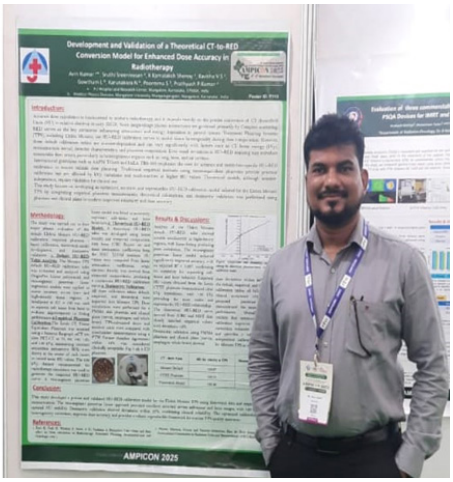
DR. DINESH KADAM ELECTED VICE PRESIDENT OF APSI

Dr. Dinesh Kadam, Head of the Plastic Surgery Department at AJHRC was elected Vice President of the Association of Plastic Surgeons of India (APSI). This national recognition highlights Dr. Kadam's profound dedication and leadership within the surgical community, further cementing the hospital's reputation for medical excellence.

His appointment serves as an inspiration to the entire healthcare team, reinforcing the institution's commitment to providing world-class patient care and fostering growth in the field of specialised surgery.

Dr. Dinesh Kadam

Dr Ganesh HK secures research grant for MASLD endocrinology study.



Presentation at The Ampicon, Guwahati, Conference.

VRIDDHI Feature

Vriddhi Anniversary: The monthly elderly engagement programme celebrates two years of specialised geriatric care.

Vriddhi is a monthly engagement program hosted by the AJHRC for all elderly individuals, aimed at promoting social interaction, mental well-being, and emotional support. Each month's session features informative guest talks, fun activities, interactive games, and meaningful discussions, on different themes, which make the programme engaging and enriching

The initiative provides a welcoming space for seniors to connect, share experiences, and enjoy moments of joy and companionship. Vriddhi reflects a strong commitment to elderly care, dignity, and community bonding, making it a valued and heart-warming program for all participants. The response has been positive with seniors finding a community that they can belong to at AJHRC.

Monthly seniors' community engagement program

The final quarter of 2025 marked a period of significant growth for the Vriddhi elderly engagement programme, focusing on holistic health and community.

- In October 2025, the session highlighted World Alzheimer's Day with a keynote by Dr. Ravish Tunga, complemented by creative crochet workshops and geriatric service orientations.
- November 2025 saw a major milestone with Vriddhi's 2nd Anniversary celebration, featuring an annual achievement report and an expert talk on vertigo by Dr. Deepalaxmi.
- The December 17 Vriddhi event was a special session on nutritional and digestive health, held in collaboration with Sharada Yoga and Naturopathy Hospital, where seniors engaged in tailored yoga therapy and lifestyle management. Together, these monthly gatherings have reinforced AJHRC's commitment to enhancing the quality of life for the elderly through education, activity, and consistent medical support.

MEDMIND

HEALTHCARE HEADLINES

INDIAN NEWS

AYUSHMAN BHARAT

SEVAK PROJECT: RURAL BREAST CANCER SCREENING

WORLD BANK LOAN TO WEST BENGAL

- DELHI RESPIRATORY DISEASE DEATH TOLL
- NIPAH IN KOLKATTA
- INDIA'S ANTIMICROBIAL
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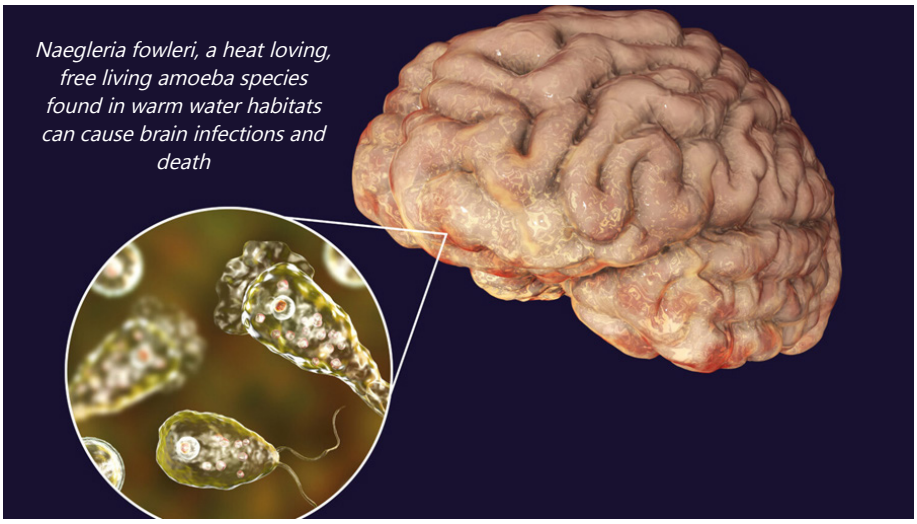
UK NHS PROSTATE CANCER DRUG

CANADA HOSPITAL WAIT TIME PATIENT DEATH SPARKS OUTRAGE

- FRONTLINE GENOMICS WITH AI
- 5G MEDICAL DEVICES

BRAIN-EATING AMOEBA:
Why Kerala Is on the Global Map and What Hospitals Must Know

The Hospital Infection Control Team

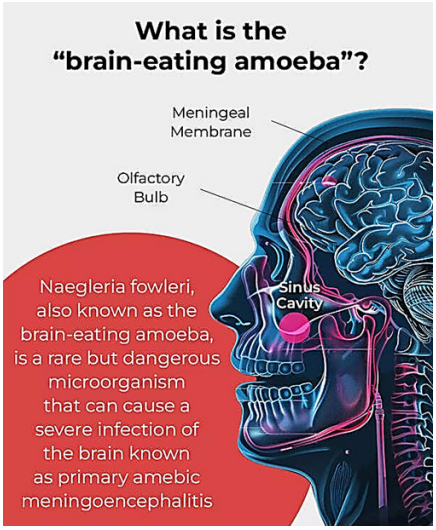


Few microbes strike as much fear as Naegleria fowleri the so-called "brain-eating amoeba." Scientifically, it causes Primary Amoebic Meningoencephalitis (PAM), a rare but ferociously aggressive infection of the brain. Clinically, it is one of medicine's most unforgiving emergencies: rapid onset, explosive progression, and historically, an almost certain fatal outcome. Yet, between 2024 and 2025, something unusual happened. Kerala, a state better known for its public-health achievements than deadly outbreaks, emerged as a global hotspot not only for reported PAM cases, but also for survival.

Naegleria fowleri is not new. First identified in Australia in 1965, it is a heat-loving, free-living amoeba found naturally in warm freshwater lakes, ponds, rivers, inadequately chlorinated pools, and even domestic water systems. Worldwide, fewer than 500 laboratory-confirmed cases have been documented. Mortality exceeds 97%.

A Rare Disease, A Deadly Reputation

Infection does not occur by drinking water. The amoeba enters only through the nose, typically during swimming, bathing, or nasal rinsing with contaminated water. From there, it takes a direct and devastating route: along the olfactory nerves, through the cribriform plate, straight into the brain often within 24–48 hours.



Once established, PAM progresses with terrifying speed. Early symptoms mimic routine meningitis fever, headache, vomiting but within days escalate to seizures, coma, and death, usually within a week.

Mortality exceeds 97%.

Why Kerala, Why Now ?

India's first PAM case was reported in Chennai in 1986. Sporadic cases followed across states, but numbers remained negligible for decades. That changed dramatically in 2024–2025. Kerala reported an unprecedented surge, with clusters across Thiruvananthapuram, Kollam,

Kozhikode, Malappuram, and Kannur. By late 2025, cumulative case counts crossed the hundred mark in some official updates figures unthinkable just a few years ago. Importantly, this is not due to a "new mutant amoeba." No peer-reviewed genomic evidence supports increased virulence of Naegleria fowleri. Instead, the rise reflects a perfect storm.

- Warming waters: Even a 1–2°C rise in freshwater temperature can multiply amoeba density ten-fold. Kerala's shallow ponds and wells are now ideal incubators.
- Stagnant post-monsoon water: Reduced rainfall and high evaporation leave behind warm, nutrient-rich pools.
- Traditional water practices: Temple ponds, open wells, and unchlorinated storage tanks remain widely used for bathing.
- Urban ecology: Rapid coastal urbanization has altered drainage, created stagnant micro-habitats, and increased bacterial loads indirectly "feeding" the amoeba.
- Better diagnosis: PCR-based testing is now available in major medical colleges, revealing cases that were earlier mislabelled as bacterial or viral meningitis.

Inside the Brain: How the Amoeba Kills

In short, the organism was always here. Our climate, ecology, and diagnostics have changed.

Only the amoeba's active form the trophozoite causes disease. Once in the brain, it unleashes damage on multiple fronts: it releases enzymes and pore-forming proteins that dissolve neurons and blood vessels. Using specialised structures, it literally bites off pieces of living brain cells. The immune response floods the brain with inflammatory cytokines, causing massive swelling. Blood–brain barrier breakdown leads to hemorrhage, thrombosis, and catastrophic cerebral edema. Death most often occurs from brain herniation due to uncontrolled intracranial pressure.

The Kerala Difference: Survival, at Last

Historically, PAM survival was almost anecdotal. Kerala has changed that narrative. India's case fatality rate, though still high (~75%), is markedly better than global averages. The difference lies in speed and systems:

- Early suspicion: Clinicians are trained to ask one critical question recent nasal exposure to warm freshwater?
- Rapid PCR confirmation: Molecular diagnostics shorten the time to definitive diagnosis.
- Aggressive combination therapy: Amphotericin B plus azoles, antibiotics, and crucially, miltefosine, a repurposed antileishmanial drug with anti-amoebic activity.
- Neurocritical care: Intensive control of intracranial pressure, seizure management, and ventilatory support have been decisive in survival cases.

District	Reported Cases	Confirmed Deaths	Notable Details
Thiruvananthapuram	15	3	Includes a 17-year-old boy who contracted the infection after swimming in a public pool.
Kollam	12	4	A 48-year-old woman died after a two-month illness; a 62-year-old man from Kodumba panchayat in Palakkad was diagnosed with the disease on October 12.
Kozhikode	10	3	A nine-year-old girl named Anaya died on August 14; a 47-year-old man from Mananthavady, Wayanad, died in October.
Malappuram	8	2	A 55-year-old woman from Vandoor is in critical condition on a ventilator.
Kannur	6	1	A three-and-a-half-year-old child tested positive and is being treated at the Institute of Maternal and Child Health in Kozhikode.
Other Districts	53	10	Includes cases from Kasaragod, Palakkad, and Wayanad.

MEDMIND HEALTHCARE HEADLINES

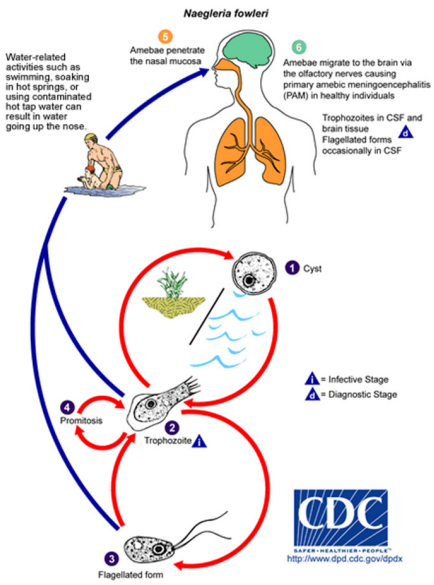
While evidence for miltefosine remains observational, its early use combined with advanced ICU care has coincided with improved outcomes.

Public Health in Action

Kerala's response has been equally notable outside hospital walls. State technical guidelines issued in 2024 standardised prevention, diagnosis, referral pathways, and treatment. Public advisories discouraged nasal exposure to untreated freshwater. Chlorination of wells and tanks was intensified. Surveillance networks were strengthened. This integration of public health, laboratory capacity, and clinical readiness offers a rare success story in managing a near-universally fatal disease.

The Take-Home Message for Healthcare Leaders

PAM remains rare but rarity offers no comfort when mortality is swift and severe. Kerala's experience sends three clear signals to hospitals everywhere:



Progression of the disease: The pathological sequence typically evolves as follows:

- Day 0–2: Amoebae travel through nasal mucosa and enter CNS.
- Day 3–5: Rapid multiplication in the olfactory bulbs; early inflammatory reaction.
- Day 5–7: Diffuse meningoencephalitis, necrosis, and cerebral edema; clinical signs of raised intracranial pressure, seizures, and coma develop.
- Terminal stage: Brain herniation due to severe edema and vascular compromise leads to death, often within 7–10 days of symptom onset.

The "brain-eating amoeba" may be ancient, but our response to it need not be primitive. Kerala has shown that even against nature's most lethal microbes, preparedness can change the story from inevitability to intervention, and from despair to survival. Prevention is truly better than cure.

- **Think early: PAM masquerades as routine meningitis.**
- **Test fast: PCR saves lives by saving time.**
- **Treat aggressively: Multimodal therapy and neurocritical care can tilt the odds.**

AYUSHMAN BHARATH HEALTH INSURANCE

India's healthcare sector saw major expansions in 2025, including over 42 crore Ayushman cards issued under AB-PMJAY scheme. The Ayushman Bharat -Pradhan Mantri Jan Arogya Yojana is the world's largest public healthcare scheme that aims at providing health insurance of up to Rs. 5 lakhs to each eligible household annually. AB -PMJAY was launched seven years ago on Sept. 23, 2018. It has made quality healthcare more affordable for over 12 crore vulnerable families. More than 86 lakh senior citizens have been enrolled in the scheme.

WORLD BANK APPROVED $286 MILLION HEALTH LOAN FOR WEST BENGAL

The World Bank approved $286 million loan for West Bengal to enhance NCD tracking for hypertension and diabetes as India hosts the world's second-largest affected population.

In the five districts of Purulia, Birbhum, Murshidabad, Maldah and Uttar Dinajpur, the program will improve access to quality healthcare services and reduce inequities in maternal and adolescent health.

MEDMIND **HEALTHCARE HEADLINES**

RESPIRATORY DISEASE DEATHS IN DELHI

Over 9,000 respiratory disease deaths reported in Delhi; nebuliser demand for kids surged up to 60%.

Delhi is experiencing a severe, year-round respiratory health crisis, due to toxic air. Official data released in January 2026 shows that Delhi recorded 9,211 deaths due to respiratory diseases in 2024, an increase from 8,801 in 2023. Six major central government hospitals in Delhi reported over 2 lakh (2,04,758) cases of acute respiratory illness (ARI) between 2022-24.

Hospital admissions for respiratory issues increased to 10,819, indicating that cases are becoming more severe. The crisis is driven by a combination of vehicular emissions, industrial pollution, construction dust, and seasonal crop burning, which cause severe AQI spikes. The polluted air is worsening chronic conditions like asthma, COPD, and bronchitis, with experts noting an increasing impact on younger, working-age adults in addition to the elderly. Experts advise avoiding outdoor activities during peak pollution, using air purifiers, and wearing N95 masks.

NIPAH CASES EMERGE IN KOLKATA

As of January 2026, fresh concerns have emerged regarding the Nipah virus, a highly infectious zoonotic disease (transmitted from animals to humans) with a high fatality rate, sometimes reaching up to 75%. Two nurses in the North 24 Parganas district of West Bengal tested positive/suspected for the Nipah virus and are in critical condition as of January 13, 2026. A National Joint Outbreak Response Team has been deployed, and over 90 people who were in close contact with the infected nurses are under observation.

The virus has recurred periodically in Kerala, with outbreaks reported in 2018, 2019, 2021, 2023, 2024, and 2025. Nipah symptoms include high fever, severe respiratory problems, headache, and muscle pain, which can rapidly progress to encephalitis (brain swelling). It is primarily transmitted via fruit bats or pigs. There are currently no specific vaccines or drugs to treat the Nipah virus; management relies on early detection, intensive supportive care, and strict isolation. Avoid consuming raw date palm sap, thoroughly wash fruit, avoid contact with fruit bats or pigs, and maintain high personal hygiene.

INDIA'S AMR CRISIS GETS NATIONAL FOCUS

Prime Minister Narendra Modi's warning on antimicrobial resistance (AMR) gains strong support from health experts. Unchecked and inappropriate use of antibiotics, weak infection prevention systems and unregulated access to antimicrobials are accelerating resistance and undermining treatment of common infections.

Earlier, PM Modi cited Indian Council of Medical Research findings showing that misuse and overuse of antibiotics often without medical supervision are reducing their effectiveness against infections such as pneumonia, urinary tract infections and bloodstream infections which are becoming harder to treat. He suggested resorting to antibiotics only on a doctor's advice. AMR already contributes to millions of deaths globally each with low- and middle-income countries bearing a disproportionate burden due to high infection rates, limited diagnostics and unregulated antimicrobial access.

HEALTHCARE CHAINS EMBARK ON PAN-INDIA EXPANSION DRIVE

The multi-speciality hospital market in India is expanding rapidly, with an estimated market value of INR 6,300 billion in 2024, projected to reach INR 9,800 Bn in 2028, reflecting a robust CAGR of around 12 per cent. Leading Indian hospital chains, including Max Healthcare, Fortis Healthcare, and KIMS Hospitals, are aggressively expanding nationwide,

moving beyond their established regional markets. This strategic growth through acquisitions and new facilities aims to capture a larger share of India's rapidly growing healthcare sector. The expansion is projected to add approximately 32,000 hospital beds over the next five years, signaling a significant transformation in the country's healthcare delivery landscape. This growth highlights the sector's critical role in India's healthcare ecosystem and its ability to cater to diverse medical needs under one roof.

RURAL BREAST CANCER SCREENING INITIATIVE EXPANDS

The Sevak Project brings practical breast cancer self-examination training to villages across Gujarat, Bihar, and Tamil Nadu, improving early detection. In a grassroots initiative aimed at early detection of breast cancer, the Sevak Project is training rural women to conduct self-breast examinations, addressing a major healthcare gap in villages where access to mammography and specialist care is limited.

FIRST GOVERNMENT IVF CENTRE IN KARNATAKA TO OPEN

KMC-RI Hubballi announces a PPP-based IVF facility to make assisted reproduction more affordable. An IVF centre is set to begin operations at the Karnataka Medical College and Research Institute (KMC-RI) under the PPP model, marking the first such initiative in a government hospital in the state.

WORLD LEPROSY DAY OBSERVED ON JANUARY 25, 2026

The adoption of multidrug therapy, the drug regimen recommended by the WHO in 1981, has transformed the treatment of Leprosy, also known as Hansen's disease. In the mid-1980s, there were more than 5 million cases of the disease, with a significant decline to, 172,717 cases reported by 133 countries in 2024.

However, of these cases, 5.4% were children under 15 and 5.3% were grade 2 disability cases, meaning they had visible impairments. Together, they indicate ongoing transmission within the community and delayed diagnosis. The social stigma attached to leprosy, can be more problematic than the disease itself, and which can persist beyond the end of treatment. Even after being cured, people endure the unending pain of social exclusion. In 2010, the international

community clearly defined leprosy as a human rights issue in an attempt to address this.

LIFE-EXTENDING PROSTATE CANCER DRUG TO BE OFFERED TO THOUSANDS IN ENGLAND

A life-extending prostate cancer drug is to be made available to thousands of men in England in a matter of weeks, after a campaign by a patient and a charity. Abiraterone has been provided on the NHS in Scotland and Wales since 2023 but not in England and Northern Ireland, except in the most severe cases. The drug is already prescribed for patients in the UK with very advanced prostate cancer that has spread. But from now on the drug will be available on the NHS in England to high-risk patients whose cancer has not yet metastasised - potentially saving hundreds of lives.

Giles Turner was part of the campaign to get abiraterone approved in England

FRONTLINE GENOMICS WITH AI: NANOPORES, LIFESAVING DIAGNOSTICS & SQUIGGLES

New Zealand's Wellington Regional Hospital, uses an AI-supported gene

sequencing tool in microbe genome identification. Instead of waiting a week for whole-genome sequencing results from a reference lab, staff can employed a harmonica-size device known as a MinION genome sequencer. The sequencer works by sampling DNA or RNA through nanopores, producing "squiggles" that contain information about the nucleotide sequence. These squiggles require a special computer program, known as a base caller, to interpret them. Using powerful AI-based software, a draft bacterial genome can be produced in as little as two to four hours.

On the other side of the world, Helmholtz Artificial Intelligence Cooperation Unit in Munich, is using machine learning to go beyond identifying a microbe's species to assessing whether the microbes in a sample are actually alive. Over the past decade, portable, low-cost sequencing has surged and has been deployed in Ebola, Lassa, and SARS-CoV-2 outbreaks. Genomic testing has becomes more accessible with AIIMS Jammu offering affordable pan-India genomic reports for cancer and rare disease patients.

NEW AI APPLICATIONS

AI is now embedded in day-to-day operations. Across the U.S., roughly 66% of physicians report using AI tools in practice. AI triage in radiology, and AI-guided remote patient monitoring are visible digital health innovations which puts AI firmly inside mainstream healthcare technology trends rather than on the experimental fringe. For example, IBM Watson is one of the AI platforms already available for business and healthcare. There is also an extensive range of AI-backed, cloud-enhanced digital healthcare innovations and services provided by AWS and Microsoft.

These advanced services can be leveraged to build intelligent healthcare assistants, innovative 5G-enabled digital health

applications, seamless EHR integrations, telehealth solutions, virtual patient monitoring systems, and precision medical analytics tools. Large systems such as Mayo Clinic, Kaiser Permanente, and Advocate Health now budget for hundreds of AI projects across documentation, operations, diagnostics, and virtual care. In short, healthcare is adjusting to a new baseline where AI is simply part of how modern care is planned, delivered, and paid for.

MORE 5G-ENABLED MEDICAL DEVICES TO HIT THE MARKET

One of the current trends in healthcare is the rise of 5G-enabled medical devices in 2025. The new devices and apps that comply with the high-end capabilities of 5G are poised to take the market by storm! Their electronics and their codebase components are natively engineered to deliver tremendously fast response times and operational efficiency never seen before (especially in combination with cloud computing and the new generation of AI solutions).

At its core, 5G technology is defined by its extraordinary bandwidth and minimal latency features that dramatically surpass the capacities of its 4G predecessor. With bandwidth capabilities potentially reaching 10 Gbps, compared to the typical peak of around 100 Mbps offered by 4G, and latency as low as 1 millisecond compared to 4G's 30–50 milliseconds, the technology's possibilities facilitate digital healthcare trends and intelligence levels previously unimaginable. The real-life implementation of healthcare digital trends via 5G-enabled devices encompasses various innovative examples:

- Remote Robotic Surgery Systems: Surgeons use precision robotic arms, guided remotely through ultra-high-definition streaming video powered by 5G, delivering real-time feedback. Such a system enables specialists to perform surgeries from distant locations without latency-induced risks.
- Wearable Health Monitors: Smart wearable devices integrated with AI-driven platforms like TensorFlow or PyTorch transmit continuous real-time patient data such as ECG or blood glucose levels to healthcare providers, facilitating proactive care and immediate interventions.
- Emergency Response Equipment: Ambulance crews utilize portable ultrasound scanners and real-time vital-sign monitoring devices connected via 5G. Data captured en route, including live-streamed ultrasound images or vital statistics, arrive at hospitals instantly, preparing medical teams ahead of patient arrival.
- Augmented Reality (AR) for Medical Training: AR headsets equipped with real-time data streams allow medical students and healthcare professionals to visualize complex procedures and anatomy in vivid detail, dramatically improving learning efficiency.

Besides changing patient care and telemedicine practices, 5G technology also boosts collaborative tools like cloud-based EHR systems, video conferencing platforms for telehealth, and cloud infrastructures with generative AI services like AWS or Azure, ensuring a much wider horizon of cross-system integrations for the wave of 5G-adapted devices with truly rapid data transfers across healthcare settings. However, data security, patient privacy concerns, and infrastructure upgrades must be carefully addressed with experienced, thoroughly selected healthcare IT partners.

AJIHM COLLEGE CHRONICLES

AJ INSTITUTE OF HOSPITAL MANAGEMENT NEWS & UPDATES

EXPERT EASE 2025: ADVANCED FDP ELEVATES TEACHING STANDARDS

The A.J. Institute of Hospital Management (AJIHM) situated on the ground floor of the hospital above the Being Mum OPD offers Masters in Hospital Administration and Bachelor in Hospital Administration degrees affiliated tot the Rajiv Gandhi University of Health Sciences in collaboration with successfully conducted the Advanced Phase of its flagship Expert Ease Faculty Development Programme (EE FDP 2) on the theme "Innovative Pedagogic Strategies for Effective Teaching – Engage | Innovate | Transform." Foundation Phase was conducted by Yenepoya (Deemed to be University) under the theme "Essentials of Effective Teaching: Plan, Engage, Assess."

The EE FDP was held on November 28–29 at the Conference Hall of A.J. Hospital & Research Centre, Kuntikana. It is designed to equip faculty members with innovative pedagogical tools, reflective teaching practices, and learner-centred approaches that foster excellence in academic delivery, research, and leadership in education.

Employee Appreciation was proudly awarded to Mrs. Primrose Vishnu, Associate Professor, AJIHM, in December 2025 in acknowledgment of her outstanding professional achievements and valuable contribution to quality and excellence in healthcare management. She earned this recognition for successfully presenting a well-researched and impactful case study at the CII – National Excellence Practice Competition, held on 26th June 2025, under the category Operational Resource Planning earning the hospital team "Gold" Recognition. In addition to this accomplishment, Mrs. Primrose Vishnu also presented the study at the prestigious National Level IMC Ramkrishna Bajaj National Quality & Best Practices Award Competition, held on 25th November 2025, securing the 2nd Runner-Up position for the hospital.

Expert Ease 2025 Advanced FDP Inaugural

Employee Appreciation for Mrs. Primrose Vishnu, Associate Professor, AJIHM

AJIHM SHINES AT CAHO SAKCON 2025 & QIMPRO 2025

AJIHM marked a proud national achievement at CAHO SAKCON 2025, India's premier platform for emerging healthcare professionals, with an outstanding performance across student and faculty categories. CAHO, the Consortium of Accredited Healthcare Oranisations, organises SAKCON, the annual conference for healthcare management professionals and students. CAHO SAKCON was held at Bhavanam Venkatram Auditorium, University Campus, Dr BR Ambedkar Open University, on 19th and 20th September 2025 on the theme 'Sustainability and Green Healthcare'.

Competing with leading institutions nationwide, AJIHM students secured multiple top national awards for patient safety, quality improvement, healthcare technology, sustainability, and operational excellence studies. The award-winning papers and posters were presented by final-year MHA students Mr. Rahul Sreejith, Ms. I. S. Mrudula, Ms. Fathima Mizna, and Mr. Prajwal Shetty, as well as final-year BHA students Ms. Rhema Abigail and Ms. Rishitha demonstrating strong academic rigour combined with practical, patient-centric and high-impact solutions to real-world healthcare challenges. AJIHM also excelled in QIMPRO quality improvement presentations, showcasing innovative projects guided by academic mentors.

Adding to this success, AJIHM faculty members received national recognition for their scholarly contributions. Mrs. Primrose Vishnu, Associate Professor and Ms. Snehal Kamble, Lecturer were recognised for their platform paper on hospital sustainability compliance with NABH guidelines, while Dr. Vijay P, Professor and Principal and Mrs. Ashika D, Associate Professor received appreciation for their research publication on nursing competency identification. Together, these achievements highlight AJIHM's strong culture of excellence in education, research, innovation, teamwork, and continuous quality improvement, reinforcing its position as a leading institute in healthcare management education.

STUDENTS WIN LAURELS AT CAHO SAKCON 2025 & QIMPRO 2025 AT HYDERABAD

SEASON OF JOY 2025: EMBRACING THE TRUE SPIRIT OF CHRISTMAS

Christmas was joyfully celebrated on 19th Dec 2025 at the AJ Institute of Hospital Management, in collaboration with the AJ Hospital and Research Centre, bringing together students, faculty members, and staff in a vibrant display of festive spirit. The campus was beautifully transformed with creative decorations, setting a warm and cheerful atmosphere that reflected the joy and serenity of the Christmas season. Students enthusiastically participated in a variety of activities, including crib making, where they showcased their creativity and understanding of the traditional Christmas story, and Christmas tree decoration, which added colour and sparkle to the celebrations. The presence of Santa Claus added excitement and cheer, spreading smiles and laughter among everyone present, while carol singing filled the venue with melodious hymns that conveyed messages of peace, love, and goodwill.

The celebration provided a meaningful platform for students to express their talents beyond academics, encouraging teamwork, creativity, and cultural appreciation. It also strengthened the bond between the institute and the hospital, highlighting the importance of togetherness and shared values in a healthcare education environment.

STAFF AND STUDENTS JOIN TOGETHER TO CELEBRATE CHRISTMAS

The Human Pulse: Keeping Compassion Alive in an AI-Driven New Year

Mrs. Ashika D, Associate Professor, AJIHM

Healthcare is stepping into a new era think digital, predictive, and super-efficient. But here's where we hit a snag: while AI-driven tools are making our hospitals smarter, they also risk pulling us away from what really matters human connection in care. This isn't just a philosophical chat; it's a pressing issue we need to tackle this year. Sure, AI helps us spot problems sooner, minimise mistakes, and boost outcomes. But it can also distance caregivers from the emotional side of healing. As we embrace this rapid change, we must ensure compassion keeps pace. We're moving toward a future of Human-Centered AI in Healthcare this is non-negotiable. Technology should enhance clinical thinking, tighten up systems, and elevate outcomes, while maintaining empathy, judgment, and respect for patient dignity as our key measures of success.

The Hidden Danger: When Tech Gets in the Way of Touch

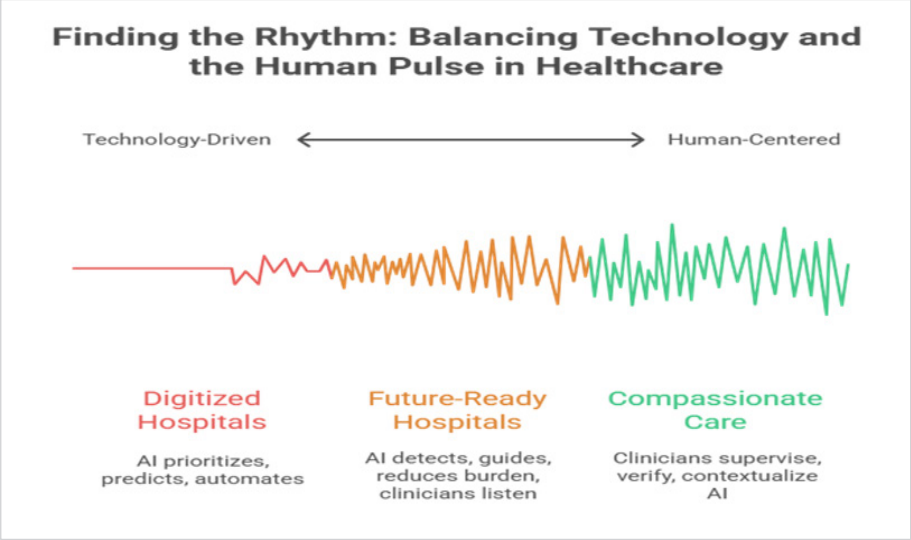
Nowadays, hospitals are loaded with technology. AI tools prioritize urgent cases, predictive models alert us to early signs of sepsis, and automated reminders help cut medication errors. But there's a cautionary note from research: technology truly enhances care only when it puts humans at the forefront. A study set for 2024 in BMC Medical Ethics highlights that patients worry about losing emotional connections, clear communication, and trust when AI steps in. Another analysis in BMC Medical Informatics and Decision Making from 2025 stressed that AI should empower not overshadow patient choice and shared decision-making. Patients are open to innovation, but they still crave the comforting presence of a human caregiver. You see, healing isn't just about precision; it's also about providing reassurance.

Hospitals That Let Data Assist While Humans Take the Lead

A forward-thinking hospital isn't just about tech; it's how that tech blends with human insight. When AI works quietly in the background spotting early declines, guiding choices, lightening the load clinicians have more time to listen, offer comfort, and build trust. We need to strike this balance: let tech handle the routine, while humans tackle the heart of the matter. Research from Science Direct (2024–2025) backs this up: Human-Centered AI boosts safety and satisfaction but only when clinicians check and contextualise its suggestions. Human oversight is the bedrock of trust.

A New Year's Resolution: Keeping Humanity at the Core of Innovation

Just like climate-smart healthcare tells us to protect our planet, AI-smart healthcare reminds us to preserve the humanity that patients depend



on. Sure, automation can streamline things and digital tools can lighten workloads, but neither can replicate the emotional presence, clarity, and comfort that truly compassionate care provides. As we step into the New Year, we need to foster a culture where technology enhances our ability to care, all while human values steer the way.

From Idea to Action: The Road Ahead

All of us in healthcare professionals, educators, administrators, and students share a weighty responsibility moving forward. As AI becomes embedded in our clinical and administrative tasks, we must use it ethically, thoughtfully, and with a full awareness of its boundaries. Boosting digital literacy needs to go hand in hand with nurturing empathy, ensuring that technical know-how never overshadows our essential human sensitivity. Every new tool we embrace should lead to safer, fairer, and kinder patient care.

"At the heart of medicine lies humanity.

This year's challenge is to ensure the technology we choose serves our wisdom but never replaces it." India's digital health landscape is growing like never before, from the Ayushman Bharat Digital Mission to AI-enhanced support tools in our hospitals. As we welcome these advancements, our task is not just to embrace new tech but to weave it in ways that strengthen human connections instead of weakening them. Our deepest commitment must be to keep the gap between a smart machine and a wise human judgment unautomated. Because a hospital can run on data, but it truly heals through humanity

As the New Year begins...

Let's greet innovation with open arms, while keeping compassion at the heart of everything we do. Let's create systems that are intelligent, efficient, and resilient but let's never lose sight of our humanity. May the year ahead bring us a healthcare setting where technology and compassion walk hand in hand, forging care that's not just cutting-edge but genuinely caring. After all, protecting that human touch is, and will always be, the most significant innovation of all.

The Green Prescription: Engineering the Hospital of the Future

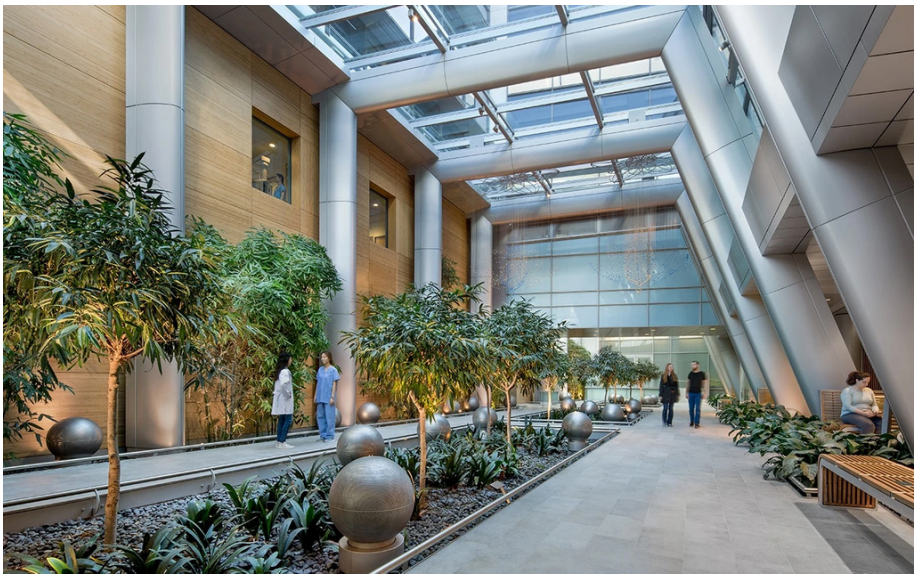
Ms. Chitra Benoy, 2nd MHA, AJIHM

In the modern medical landscape, the mandate of "Do No Harm" is extending beyond the clinic and into the biosphere. As defined by the World Health Organization (WHO), a sustainable healthcare system must restore health while minimising its ecological footprint. For hospitals resource-intensive hubs operating 24/7 sustainability is no longer a peripheral concern; it is a clinical and financial necessity.

I. Powering the Cure: Precision Energy Management

Hospitals are energy giants, relying on massive electrical loads for life-saving equipment, HVAC systems, and IT infrastructure. To mitigate environmental impact and soaring overhead, institutions are adopting a three-tier "Smart Power" strategy.

- Smart Infrastructure: Implementing automated HVAC systems that utilize real-time occupancy data to regulate climate control ensures patient comfort while eliminating energy "bleed" in unoccupied zones.
- Intelligent Lighting: Transitioning to LED technology which consumes 75–80% less energy than traditional bulbs paired with motion sensors, creates an immediate drop in baseline consumption.



Santa Clara Valley Medical Center's Sobrato Pavilion is a LEED certified, eco-friendly rehabilitation center. Photo by David Wakely

- Green Architecture: Utilizing thermal insulation and natural light-harvesting designs reduces the "thermal load," allowing buildings to remain temperate with minimal mechanical intervention.

Case Study: The Solar Shift at Holy Family Hospital

In 2014, Holy Family Hospital redefined healthcare energy by installing a 300 kW rooftop solar PV plant. Spanning 4,000 m², the 1,000-module system generates 500,000 kWh of green energy annually. By partnering with STEAG Energy Services India (SESI) under a 20-year agreement, the hospital avoids 300 tons of carbon emissions each year. This solar integration, combined with an LED retrofit that cut lighting costs by 50%, offers a payback period of just 5–8 years, after which the electricity is virtually free.

II. Redefining Refuse: The Circular Economy

While 85% of hospital waste is non-hazardous, the remaining 15% presents a complex challenge of toxicity and infection risk. A sustainable system moves away from the "linear" model of disposal and toward a Circular Economy through

three primary pillars:

1. Source Segregation & Digitalisation: Meticulous sorting at the point of generation keeps recyclables out of landfills. Simultaneously, moving toward digital health records slashes paper waste and improves data efficiency.
2. Supply Chain Responsibility: Partnering with suppliers who provide biodegradable or recyclable packaging reduces waste before it even enters the hospital gates.
3. The Biogas Revolution: Organic waste from hospital kitchens is being reimagined as a fuel source. By installing biogas digesters, hospitals convert food waste into methane for cooking or heating water, while the residual slurry provides nutrient-rich fertilizer for hospital grounds.

Case Study: Zero-Waste Achievement at LMTMG Hospital

In 2017, the 1,462-bed Lokmanya Tilak Municipal General (LMTMG) Hospital in Mumbai tackled its 460 kg daily food waste challenge. Collaborating with the BMC and the NGO ECO ROX, the hospital established thirteen brick-lined compost pits. This system processes 168 MT of food waste annually, converting it into nutrient-rich manure for campus plantations. This closed-loop approach successfully diverts massive quantities of waste from city landfills.

The Bottom Line: Care for the Planet, Care for the Patient

Sustainability in healthcare is a triple win: it reduces operational overhead, enhances accreditation standards, and improves public trust. By embracing renewable energy and responsible waste cycles, we ensure that our healthcare systems remain resilient and eco-friendly for generations to come. After all, a healthier environment is the ultimate foundation for healthier lives.

Fun Corner

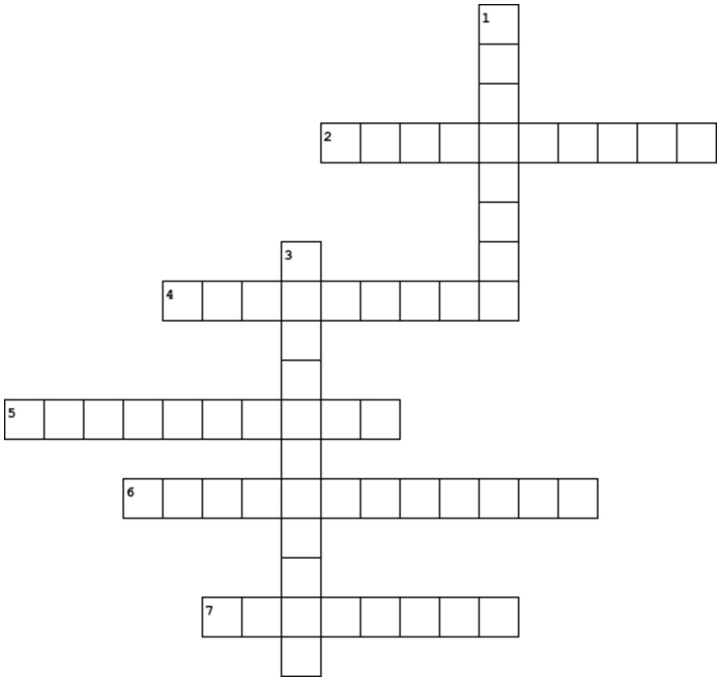
A. UNSCRAMBLE THE MEDICAL TERMS

SIEATNASEHA
CATBNOIITI
HTACRTEE
ARHEOHYCETMP
SYLISIDA
GEYNXO
RTYPOEHHIPSYA
ROLIDYGAO
OCCANIVTNAI
MSIDOISAN
GSAHDCRIE
IMTOETPNPNA
NIECRSANU
CEITERNOP
TOVISRI

Answers to A. Word Scramble

Anaesthesia, Antibiotic, Catheter, Chemotherapy,
Dialysis, Oxygen, Physiotherapy, Radiology, Vaccination,
Admission, Discharge, Appointment, Insurance,
Reception & Visitor

B. DECODE THE DEPARTMENTS



ACROSS

2 Cares for kidney-related disorders

4 Department for sudden illness or accidents

5 Place where medical tests are done

6 Department that keeps hospital clean

7 Treats patients with cancer

DOWN

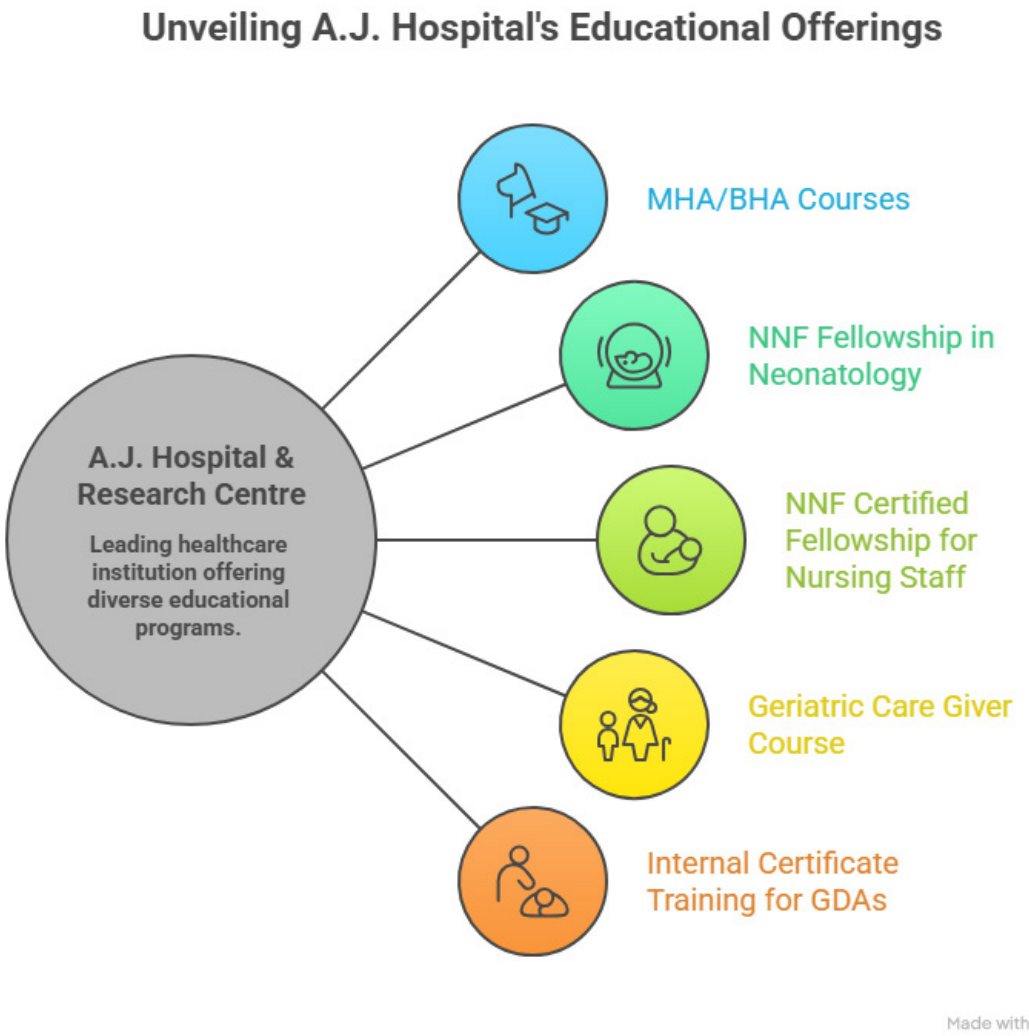
1 Manages and dispenses medicines

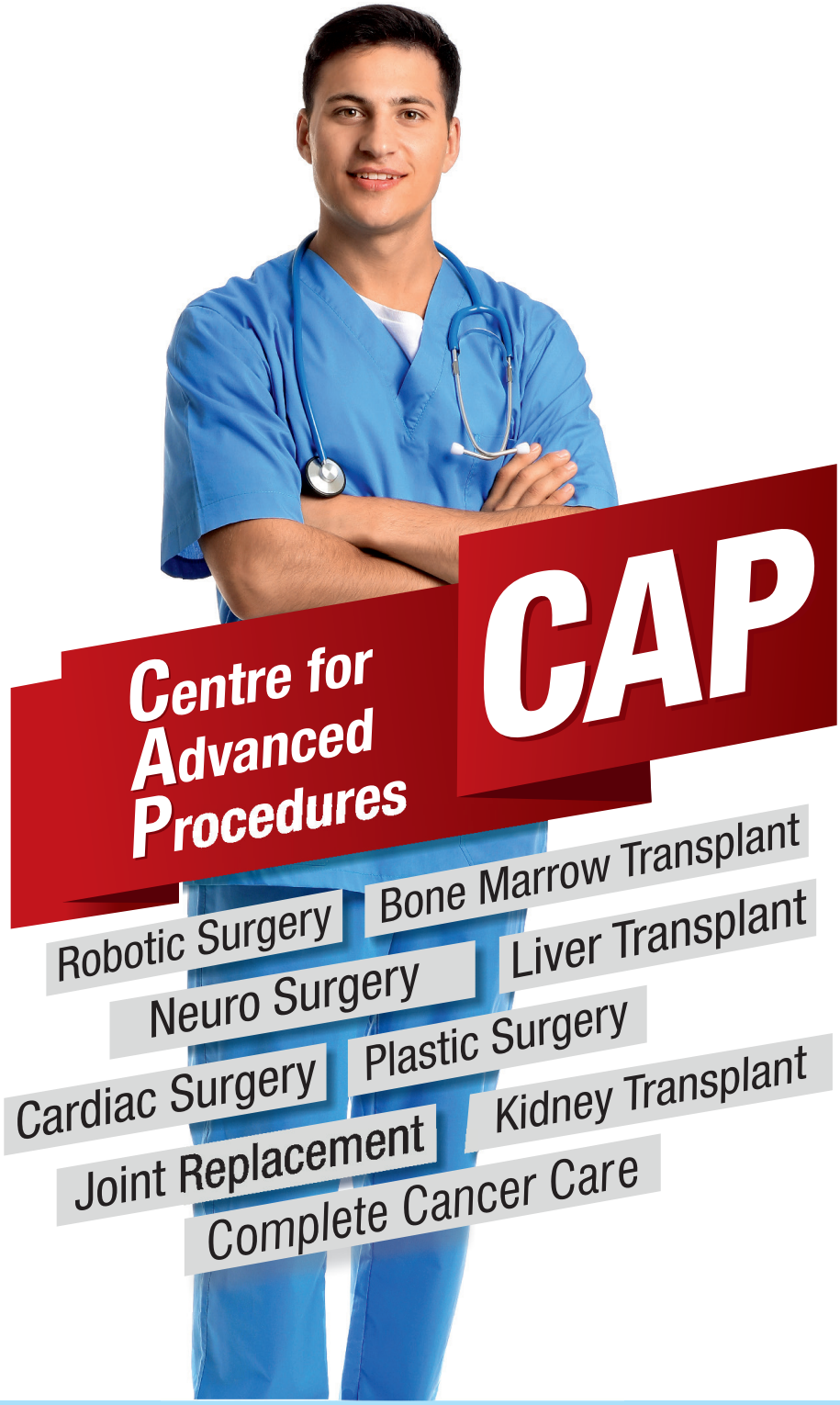
3 Treats bone and joint disorders

Courtesy Snehal Kamble, AJIHM

COURSES AVAILABLE AT AJIHM & AJHRC

1) MHA/BHA courses
2) NNF Fellowship in Nenotology for MD Paediatrics
3) NNF Certified Fellowship for Nursing staff
4) Geriatric Care Giver course certified by Health Care Sector Skill Council
5) Internal Certificate Training for General Duty Assistants





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HEALTH • HOPE • HAPPINESS

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AJ Pulse

Feedback and Contact

We eagerly look forward to hearing from you! Please send your letters and feedback to us at the contact details below. The best letters will be featured in the next issue.

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