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JIGME DORJI WANGCHUCK NATIONAL REFERRAL HOSPITAL



Advancing Compassionate Care and National Well-being

Annual Report 2025





Annual Report 2025

Jigme Dorji Wangchuck National Referral Hospital

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FOREWORD



I am pleased to present the 11th Annual Report of Jigme Dorji Wangchuck National Referral Hospital for the year 2025. This report provides a comprehensive overview of the hospital’s activities, achievements, and progress over the past year. I extend my sincere appreciation to all Heads of Departments, staff, and the Editorial Board for their dedication in bringing out this report.

I would like to commend our staff for their unwavering commitment to delivering quality healthcare services, particularly in the face of ongoing human resource

challenges. Despite these constraints, the hospital has achieved significant milestones in 2025, contributing positively to the nation's health and socio-economic well-being.

I warmly welcome all staff who joined us during the year and extend my heartfelt gratitude and best wishes to those who have moved on or retired. We remain committed to enhancing efficiency and strengthening the quality of care we provide to our people. Together, we will continue to strive for excellence.

Tashi Deleek



Dr. Pem Namgyel
President,
JDWNRH/KGUMSB

Editorial

For the year 2025, the hospital is happy to bring out the 11th Edition of the Annual Report summarizing a year-full of achievements and challenges overcome. On 6th January 2025, JDWNRH announced the establishment of a six bedded dedicated stroke unit with trained nurses to deliver exceptional care to stroke patients in the country, which has proven to show reduction in the death and in long-term dependency. Football team of JDWNRH emerged victorious in the RCSC departmental tournament, a significant achievement that has filled the institution with pride on 12th January 2025.

Micro-Surgical Eye camp was organized from 21st to 22 March 2025 with support from Tilganga Institute of Ophthalmology, Kathmandu, Nepal by Pry Eye Care Program from Ministry of Health at Department of Ophthalmology's Gyalyum Kesang Choeden Wangchuck National Eye Centre. The camp provided essential ophthalmic surgical

services to individuals with Cataracts while enhancing the skills of healthcare professionals in the region. This initiative is part of a broader commitment to improving eye care accessibility and quality within the community.

A team from JDWNRH conducted Total Knee Arthroplasty (TKA) camp from 24th – 27th March 2025 at ERRH to provide access to advanced orthopedic care and alleviate the pain and limitations caused by knee problems. The hospital achieved yet another milestone towards establishing comprehensive cardiac care centre on 28th March 2025 with the successful completion of the first-ever Atrial Septal Defect (ASD) closure at Heart Centre. The procedure was performed by Dr. Mahesh Gurung, Interventional Cardiologist at JDWNRH, in collaboration with Dr. Kothandam Sivakumar, Head of Pediatric Cardiology and Senior Consultant at the Institute of Cardio-Vascular Diseases, The Madras Medical Mission, Chennai.

The 30th Blood Drive Campaign was a success, made possible with the invaluable support of officials from the JDWNRH on 2nd April 2025 at Royal Thimphu College. On 6th April 2025, as part of the pre-event of World Health Day Observation 2025, the Ministry of Health and National Medical Services organized a health walk today from Changangkha to Kuensel Phodrang. The hike along the 5.2 km trail saw participation from members of the JDWNRH, officials from the Royal Government of Bhutan, members of the international development community, civil society organizations, and media firms. The initiative aimed to raise awareness about the rising prevalence of non-communicable diseases (NCDs) in the country and their far-reaching impact-not only on the affected individuals and their families but also on society as a whole.

JDWNRH initiated Outpatient Geriatric Clinic for our elderly community of the age group 65 years and above in the General Outpatient Department upon joining of Dr. Sonam Choki, Fellowship in Geriatric Medicine from 7th April 2025. The objective of this clinic is to promote health and manage complex medical, cognitive, social and psychological issues.

The hospital in collaboration with Rajavithi Hospital, Thailand conducted the Thai Bhutan Laparoscopic and Endoscopy Camp from 21st to 23rd April 2025. The Camp was facilitated by and conducted in the Department of Surgery and Endoscopy unit of JDWNRH. It marked a significant milestone in Bhutan's ongoing efforts to strengthen advanced surgical and endoscopic services. A total of 93 procedures were performed over three days which includes Endoscopic Retrograde Cholangiopancreatography (ERCP), Endoscopic Ultrasound (EUS), Endoscopic Submucosal Dissection (ESD), Upper GI Endoscopy, Colonoscopy. One of the most significant achievements of this camp was the successful performance of 4 Endoscopic Ultrasound (EUS) procedures—the first ever conducted in Bhutan.

JDWNRH commemorated our 8th Foundation Day on 2nd May 2025 coinciding with the Birth Anniversary of His Majesty the Third Druk Gyalpo Jigme Dorji Wangchuck. The occasion was observed with the offering of butter lamps and the launch of the Annual Report 2024. At JDWNRH, a significant milestone was achieved in a remarkable display of medical excellence as a team of Bhutanese and team from Rajavithi Hospital, Thailand successfully conducted the second kidney transplant signaling the country's growing independence in organ transplantation. This follows Bhutan's first successful

kidney transplant in September 2023, conducted by the same collaborative team from JDWNRH and Rajavithi Hospital.

On 23rd July 2025, the Economic Affairs Committee of the National Council held a meeting with officials from JDWNRH and the National Medical Services (NMS) to review public service delivery in Bhutan's healthcare system. The Committee expressed concerns about issues affecting service delivery, such as staff shortages, high attrition rates, and limited career incentives, particularly in rural areas. Discussions focused on the need for a specialist recruitment plan, performance-based incentives, clearer institutional roles, and improved coordination among agencies to enhance public healthcare services. Dr. Pem Namgyal was appointed as the President of the Khesar Gyalpo University of Medical Sciences of Bhutan & JDWNRH on 13th August 2025 by the Chairperson of the Governing Council of the University, Lyonpo Tandin Wangchuk, Hon'ble Minister for Health, Royal Government of Bhutan. Of his more than 36 years of professional experience, over 23 years were spent as an international professional with the World Health Organization (WHO) where he held several senior leadership positions, including assignments at WHO Headquarters in Geneva and the WHO Regional Office for South East Asia in New Delhi.

On 13th September 2025, a new chapter in Bhutan's healthcare began as the country's first-ever multidisciplinary breast clinic opened its doors at the Gyaltsuen Jetsun Pema Wangchuck Mother and Child Hospital in JDWNRH. The inauguration, graced by Her Majesty Queen Mother Sangay Choden Wangchuck, the Royal Patron and President of the Gyalyum Charitable Trust, is described as a historic milestone in the fight against breast cancer. Emergency Department marked World Sepsis Day on 13th September 2025, aiming to reduce the risk of hospital-acquired infections and stop sepsis aligning to First

Local Sepsis Guideline with Sepsis Awareness program.

The inaugural Bhutan Laparoscopic Surgery Conference 2025 commenced on 26th September 2025, in Thimphu, marking a landmark occasion in Bhutan's medical history. As the first conference of its kind in the country, it brought together leading surgeons, healthcare professionals, and internationally renowned laparoscopic surgery experts from India, Pakistan, Nepal, Sri Lanka, and the Maldives to promote advancements in minimally invasive surgery. The opening ceremony was graced by His Excellency Lyonpo Tandin Wangchuk, Minister of Health, along with esteemed dignitaries from the medical and government sectors.

On 29th September 2025, the Heart Center in JDWNRH observed World Heart Day 2025 and 2nd Foundation day to the center. On the auspicious day of 11th November 2025, as the nation celebrates the 70th Birth Anniversary of His Majesty the Fourth Druk Gyalpo, the Chief Justice of the Royal Government of Bhutan handed over a cheque amounting to over Nu. 1.4 million from the Judiciary fraternity towards the Patient Welfare Fund.

The family of JDWNRH on 19th November 2025, with the presence of His Eminence Latshog Lopen formally conferred "Dhar" to Mr. Sherab Zangpo on his appointment as the Director of the Department of Support Services in presence of Honorable Secretary, Ministry of Health, Dr. Mimi Lhamu Mynak, Offtg. President, JDWNRH. Prior to this appointment, he served as the Chief Program Officer at the Ministry of Industry,

Commerce and Employment, bringing with him a wealth of experience and an unwavering dedication to public service.

First successful Endoscopic endonasal trans-sphenoidal removal of pituitary tumor or removal of pituitary tumor through the nose, represents one of the most transformative milestones in the evolution of modern neurosurgery and skull-base surgery on 19th November 2025 by Dr Tandin Wangyel Dorji, Neurosurgeon, Dr Kencho Rinzin, ENT specialist and Dr Tandin Tshomo, Neuro-anesthetist along with their respective teams.

The Department of Orthopaedics announced a significant milestone in the advancement of spine care in Bhutan by the successful completion of first corrective surgery for scoliosis on 21st November 2025. The complex procedure was performed on a 22-year old woman with neuromuscular scoliosis by Dr. Kuenzang Wangdi, Director and Spine Surgeon, together with Dr. Letho, Spine Surgeon. The Department of Ophthalmology's Gyalyum Kesang Choeden Wangchuck National Eye Centre observed World Sight Day on 22 November 2025 in commemoration of the 70th Birth Anniversary of His Majesty the Fourth Druk Gyalpo.

From December 2nd to 5th, 2025, the Heart Center, JDWNRH hosted the First Workshop on Coronary Chronic Total Occlusion (CTO) Intervention welcoming Dr. Satoru Sumitsuji, Guest Professor, Cardiovascular/Future Medicine, Osaka University, Japan—an international expert in CTO interventions. On 13th December 2025, the hospital and Thromde Health Centre, proudly hosted the Civil Service Award Ceremony. The President of JDWNRH formally conferred the Civil Service Awards upon the distinguished recipients

in recognition to 56 civil servants, comprising 8 recipients of the Lifetime awards, 11 recipients of the Gold Medal, 13 recipients of the Silver Medal, and 24 recipients of the Bronze Medal.

The hospital marked the end of the year 2025 by setting up of Rheumatology Clinic where Dr. Sonam Yangchen provided services to general public requiring the service.

Tashi Deleek

Editorial Board

Snapshot, 2025

| Sl.No | Hospital Statistics | 2021 | 2022 | 2023 | 2024 | 2025 |
|-------|--------------------------------|--------|--------|--------|--------|-------|
| 1 | Bed Strength | 381 | 381 | 381 | 381 | 565 |
| 2 | Inpatient Admission (Patients) | 16,338 | 16,364 | 16,678 | 17,855 | 20055 |
| 3 | Bed Occupancy Rate | 79% | 73% | 76% | 71% | 86% |
| 4 | Average Length of Stay (Days) | 6.8 | 6.3 | 6.0 | 5.0 | 6.8 |
| 5 | Mortality Rate | 2.8% | 3.9% | 3.6% | 3.3% | 4% |
| 6 | Total of Deliveries | 4,300 | 4,139 | 3703 | 3404 | 4109 |

| | | | | | | |
|---|-------------------------|---------|---------|---------|---------|---------|
| 7 | Total Caesarean Section | 1,419 | 1,468 | 1,431 | 1230 | 1572 |
| 8 | Total Surgeries | 8,644 | 7,547 | 9,277 | 14,653 | 10,862 |
| 9 | Total OPD Attendance | 605,398 | 578,433 | 593,290 | 460,760 | 635,138 |

Table 1: Key Hospital Statistics, 2021 - 2025

| Sl.No | Diagnosis | Count | % |
|-------|---------------------------------|--------|-------|
| 1 | Hypertension | 44325 | 23.1% |
| 2 | Other Morbidities | 41246 | 21.5% |
| 3 | Chronic Kidney Disease | 30103 | 15.7% |
| 4 | Diabetes Mellitus | 21404 | 11.2% |
| 5 | Dental Caries | 16127 | 8.4% |
| 6 | Follow up Review | 10475 | 5.5% |
| 7 | Pneumonia | 8939 | 4.7% |
| 8 | Stroke | 6993 | 3.6% |
| 9 | Disorders due to use of alcohol | 6410 | 3.3% |
| 10 | Dental Examination | 5854 | 3.1% |
| 11 | Total | 191876 | 100% |

Table 2: Top 10 Morbidity, 2025

| Sl.No | Diagnosis | Count | % |
|-------|------------------------------|-------|-------|
| 1 | Hemorrhagic Stroke | 71 | 19.0% |
| 2 | Cardiac Arrest (at ER) | 56 | 15.0% |
| 3 | Alcoholic Liver disease | 51 | 13.6% |
| 4 | Community Acquired pneumonia | 50 | 13.4% |
| 5 | End Stage Renal Disease | 37 | 9.9% |
| 6 | Carcinoma of Stomach | 23 | 6.1% |
| 7 | Septic shock | 23 | 6.1% |
| 8 | Carcinoma of Liver | 22 | 5.9% |

| | | | |
|----|-----------------------|------------|----------------|
| 9 | Chronic Liver disease | 21 | 5.6% |
| 10 | Multi organ failure | 20 | 5.3% |
| 11 | Total | 374 | 100.0 % |

Table 3: Top 10 Mortality, 2025

| Department/Unit | New | Old | Allocated | No Show | Total Seen |
|--|-------|-------|-----------|---------|------------|
| Heart Center | | | 16288 | | 16288 |
| Department of Community Health | 83616 | 5211 | 89394 | 567 | 88827 |
| Department of Forensic Medicine and Toxicology | 2764 | 1 | 1704 | 81 | 1623 |
| Department of Anesthesiology | 1358 | 4 | 1362 | 78 | 1284 |
| Department of Dentistry | 63832 | 2849 | 66680 | 5931 | 60749 |
| Department of Dermatology | 19872 | 1456 | 22950 | 1617 | 21333 |
| Department of Emergency Medicine | | 0 | 27766 | | 27766 |
| Department of ENT and Head Neck Surgery | 41210 | 283 | 44487 | 2994 | 41493 |
| Department of General Practice | 70931 | 1554 | 76804 | 3315 | 73489 |
| Department of Gynaecology and Obstetrics | 26989 | 513 | 26999 | 1070 | 25929 |
| Department of Medicine | 48230 | 10405 | 58635 | 10672 | 47963 |
| Department of Oncology | 1474 | 0 | 1474 | 101 | 1373 |
| Department of Ophthalmology | 59128 | 2547 | 70457 | 6992 | 63465 |
| Department of Orthopaedics | 27753 | 281 | 29812 | 1116 | 28696 |
| Department of Pediatrics | 49410 | 1095 | 50505 | 2669 | 47836 |
| Department of Physiotherapy and Rehabilitation | 11915 | 3768 | 15683 | 1343 | 14340 |
| Department of Psychiatry | 17807 | 1059 | 18866 | 1681 | 17185 |
| Department of Surgery | 23960 | 3823 | 27783 | 704 | 27079 |
| Diabetes Clinic | 11612 | 1254 | 12866 | 593 | 12273 |

| | | | | | |
|--|----------------|---------------|----------------|---------------|----------------|
| Kidu Medical Service Center | 481 | 0 | 482 | 11 | 471 |
| Maternal Fetal Medicine Clinic | 2052 | 720 | 2772 | 50 | 2722 |
| Nephrology Unit | 6036 | 1033 | 7069 | 384 | 6685 |
| Nutrition Unit | 1090 | 1187 | 2277 | 25 | 2252 |
| Pain Management & Palliative Care Unit | 1993 | 0 | 1993 | 74 | 1919 |
| Palliative & Homecare Unit | 1564 | 187 | 1751 | 76 | 1675 |
| VVIP Department | 466 | 0 | 466 | 43 | 423 |
| Grand Total | 575,543 | 39,230 | 677,325 | 42,187 | 635,138 |

Table 4: Total Outpatient Attendance, 2025

| Sl.No | Department | Services | Total |
|------------------------------------|-------------------------|-------------------------------------|--------------|
| 1 | Radiology | JDWNRH X-Ray | 64402 |
| | | MCH X-Ray | 3350 |
| | | Total X-Ray | 67752 |
| | | JDWNRH Ultrasound | 46850 |
| | | MCH Ultrasound | 14024 |
| | | Total Ultrasound | 60874 |
| | | Mammography | 681 |
| | | Breast Sonography | 116 |
| | | Breast IR Procedure | 9 |
| | | Total Mammogram | 806 |
| | | Bone Densitometry (DEXA) | 576 |
| | | Computed Tomography Scan (CT) | 7704 |
| | | Magnetic Resonance Imaging (MRI) | 7518 |
| | | Body Interventional Radiology (IVR) | 1099 |
| Total Services at Radiology | 146329 | | |
| 2 | Other Diagnostics Units | CHD Ultrasound | 6374 |

| | | |
|---|--|---------------|
| | Non-Invasive Cardiology Unit (ECG,Echo,Holter,TMT) | 16461 |
| | Ophthalmic Diagnostic Procedure | 13590 |
| | Total Services at Other Units | 36425 |
| 3 | Grand Total | 182754 |

Table 5: Total Radio-diagnostic Services, 2025

| Procedures/Cases | Total |
|-----------------------------|--------------|
| Prophylaxis | 2781 |
| Permanent Fillings | 13825 |
| Temporary Fillings | 1659 |
| Root Canal Treatment | 7266 |
| Surgical Extraction | 887 |
| Extractions | 11940 |
| Surgical Cases | 273 |
| Visible Light Cure Filling | 600 |
| Maxillofacial Fracture | 82 |
| Oral Precancerous Lesions | 188 |
| Oral Cancer | 13 |
| Complete Denture (Both Jaw) | 227 |
| Full Denture (One Jaw) | 122 |
| Partial Denture | 3411 |
| Denture Repair | 2428 |

| | |
|-----------------------------|-------|
| Crown & Bridge | 425 |
| Acrylic Crown (Temporary) | 664 |
| Orthodontic | 1852 |
| X-Ray Flim Intraoral (IOPA) | 6108 |
| X-Ray Flim Extra Oral (OPG) | 1269 |
| Oral Medicine Cases | 15627 |

| | |
|---------------------------------|---------------|
| Referral Cases (Within Country) | 300 |
| Total | 71,947 |

Table 6: Annual Dental Activity Report, 2025

| Unit | Number of Tests performed |
|----------------------------|----------------------------------|
| Biochemistry | 2515328 |
| Immunology | 301852 |
| Body Fluid | 23523 |
| Blood Bank | 211125 |
| Cytology | 21280 |
| Haematology | 858998 |
| Histopathology | 29895 |
| Serology | 99697 |
| Bacteriology | 44815 |
| TB | 11994 |
| Parasitology | 61929 |
| MDL | 294 |
| MCH Lab | 29454 |
| Sample outsourced Lal Path | 3543 |
| Sample shipment (RCDC) | 840 |
| Sample Collection | 253289(Patients) |
| Total | 3,532,704 |

Table 7: Total Laboratory Tests, 2025

| Sl.No | Specialty | Total Count | % Contribution |
|--------------|---------------------------------|--------------------|-----------------------|
| 1 | Others(Overlapping Unspecified) | 3060 | 29.10% |
| 2 | OBGYN | 2069 | 19.70% |
| 3 | General Surgery | 2008 | 19.10% |
| 4 | Urology | 817 | 7.80% |

| | | | |
|---|----------------|-----|-------|
| 5 | ENT | 756 | 6.90% |
| 6 | Orthopedics | 728 | 5.60% |
| 7 | Cardiothoracic | 585 | 4.00% |

| | | | |
|-----------|----------------------|--------------|-------------|
| 8 | Ophthalmology | 426 | 4.00% |
| 9 | Neurosurgery | 237 | 2.30% |
| 10 | Plastic Surgery | 113 | 1.10% |
| 11 | Dental/Maxillofacial | 63 | 0.60% |
| 12 | Total | 10862 | 100% |

Table 8: Total Surgery, 2025

| Fiscal Year | Expenditure (BTN Millions) |
|--------------------|-----------------------------------|
| 2024-2025 | 730.00 |
| 2023-2024 | 595.598 |
| 2022-2023 | 501.025 |
| 2021-2022 | 214.026 |

Table 9: Yearly External Referral Expenditure, 2021 – 2025

| Sl. No | Case Type | 2019-20 (BTN M) | 2021-22 (BTN M) | 2022-23 (BTN M) | 2023-24 (BTN M) | 2024-25 (BTN M) |
|---------------|------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| 1 | Cancer | 134 | 52 | 376 | 382 | 410 |
| 2 | Kidney | 21 | 3 | 12 | 11 | 52 |
| 3 | Heart | 112 | 29 | 188 | 114 | 86 |
| 4 | Neuro | 86 | 13 | 75 | 108 | 103 |
| 5 | Hip Replacement | 4 | 0 | 22 | 21 | 65 |
| 6 | Knee Replacement | 20 | 1 | 32 | 24 | 12 |
| 7 | Eye | 22 | 15 | 42 | 11 | 15 |
| 8 | Dental | 3 | 1 | 0 | 0 | 2 |
| 9 | Other case | 115 | 40 | 251 | 522 | 499 |

| | | | | | | |
|----|--------------|------------|------------|------------|-------------|-------------|
| 10 | Total | 517 | 154 | 998 | 1193 | 1244 |
|----|--------------|------------|------------|------------|-------------|-------------|

Table 10: Diagnosis-Wise Yearly External Referral Cases, 2019 – 2025

Quality Assurance Division

Quality Assurance Division

Introduction

Quality Assurance Division (QAD) was established in March 2017 following the organizational development exercises 2015 recommendation of Royal Civil Service Commission. The office is mandated to improve the quality of healthcare services in JDWNRH in line with the Bhutan Healthcare Standard for Quality Assurance and National Accreditation Board for Hospitals and Healthcare providers, Quality Council

of India since 2024. The office is working towards ensuring that healthcare professionals develop processes for continuous quality improvement by providing necessary skills and abilities to plan, define, monitor, improve and evaluate quality on a continuous basis in order to continuously improve the services we provide to our patients and their families.

The unit is run by two staff headed by Ms. Tshering Cheki as officiating Chief Program Officer with MSC in Administration & Management and PhD in the area of Hospital Management & Patient Safety. She is supported by one Assistant Program Officers, Mr. Rajendra Sharma with Bsc in Health Studies(Hons).

Key achievements:

1. Instituting Life saving courses for all healthcare professionals- inclusive of Advanced cardiac life saving, Basic life support, Pediatric advanced life saving course and first aid.
2. Integration of KPIs in Epis and development of the KPI dashboard.

Department specific Key performance indicator presentation

1. Annual QA report, JDWNRH 2025
2. Inpatient satisfaction survey report 2025
3. Outpatient satisfaction survey report 2025
4. OPD waiting time survey report 2025
5. 5S CQI survey report 2025
6. TAT survey report 2025
7. Incident summary 2025

Table 1: Annual KPI report of JDWNRH for year 2025

Remarks: The KPIs are aggregated from indicators submitted by various departments/units and are presented as a single consolidated value. However, as several departments/units/divisions have not submitted their indicators, the values presented also reflect unreported indicators. Therefore, to obtain department-wise or unit-wise clinical performance indicators, readers are advised to refer to the remarks section at the end of the table for a critical analysis of the performance of their respective departments/units/divisions.

Quality Assurance Division

| | | | | | | | |
|--|--|--|--|--|--|--|--|
| | | | | | | Pediatric, Medicine, ENT, Surgical, reporting from all reported from Jan Decembe ^F Eye ward- 100% Orthopedic and | from Emerg ency 0% reportin g comp |
|--|--|--|--|--|--|--|--|

| | | | | | | | |
|-----------------------|-----------------|-----------------------|-----------------------|-----------------|-----------------|---|------------------------------|
| | | | | | | Psychiatric and dentistry- Not Gyna-June to 12 months- Derma-Jan November [†] November [†] | lianc e Departm ent |
| A V | 49. 5 | 163 4.8 | 157 7.0 | 55 ² | 598 .6 | 0:16:0 ⁴ | N ^R |
| T o t a l | 59 ⁴ | 196 1 ⁸ | 189 2 ⁵ | | 718 4 | | N ^R |
| D e c | 4 ⁵ | 170 2 | 165 5 | 55 ² | 64 ² | 0:16:4 ⁹ | N ^R |
| N o v | 5 ⁰ | 146 9 | 155 7 | 55 ² | 45 ⁰ | 0:18:3 ⁵ | N ^R |
| O c t | 4 ⁰ | 169 1 | 157 8 | 55 ² | 49 ⁹ | 0:23:2 ⁷ | N ^R |
| S e p t | 5 ² | 171 9 | 169 8 | 55 ² | 60 ⁰ | 0:17:1 ⁰ | N ^R |
| A u g | 5 ¹ | 173 2 | 169 4 | 55 ² | 74 ⁶ | 0:14:4 ¹ | N ^R |
| J u l y | 4 ² | 173 3 | 172 1 | 55 ² | 69 ⁰ | 0:14:1 ³ | N ^R |
| J u n e | 5 ⁸ | 160 4 | 151 8 | 55 ² | 56 ² | 0:10:5 ⁹ | N ^R |
| M a y | 6 ³ | 130 7 | 127 2 | 55 ² | 69 ¹ | 0:13:3 ³ | N ^R |
| A p r | 4 ⁸ | 156 1 | 141 8 | 55 ² | 64 ⁶ | 0:22:0 ⁵ | N ^R |

| | | | | | | | |
|------------------|---|---|--|---|--|---|--|
| M a r | 5 ³ | 188 0 | 181 6 | 55 ² | 57 ¹ | 0:13:3 ⁰ | N ^R |
| F e b | 5 ⁴ | 155 0 | 136 7 | 55 ² | 51 ⁵ | 0:14:2 ⁷ | N ^R |
| J a n | 3 ⁸ | 167 0 | 163 1 | 55 ² | 57 ² | 0:13:1 ⁶ | N ^R |
| K P I s | He alth Fac ilit y Mo rtal ity | He alth Fac ilit y Ad mis sion | He alth Fac ilit y Dis cha rge d | He alth Fac ilit y Be d stre ngt h | He alth Fac ilit y Sur ger y Per for med | Orthopedic, Eye, Time for initial indoor patients ENT, Surgical, assessment of Dermatology, (Gynecology, Psychiatric, Medicine, Pediatric, Dentistry ³) | emerge ncy patient s Time for initial assessme nt of |
| S N | 1 | 2 | 3 | 4 | 5 | | |

Quality Assurance Division

| | | | | | | |
|--|---|---|--|-------------------------------|---|-------------------------------|
| Psychiatric & Eye - 100% reporting for all 12 months. reported from Jan. Orthopedic - Not Medicine, ENT, Gynae- June to to December. Dermatology January to November. Surgery & November Pediatric, | Jan-June- represents data from all the Medical and AICU data. August units. July- Only -November AICU data only. December not reported. | 100% reporting from Nursing compliance Department | year (from Jan. to through the November) Reported | Not reported from Jan to Dec. | November), except for December. year (from Jan. to through the Reported | Not reported from Jan to Dec. |
| 10 ⁰ | 39.0 ³ | 94.61% | 1.0 ⁸ | N ^R | 0.00% | N ^R |
| | | | 1 ³ | | | N ^R |

| | | | | | | |
|---|--|---|---|--|--|---|
| 10 ⁰ | NR | 99.56% | 2 | NR | 0.00% | NR |
| 10 ⁰ | 53.4 ⁸ | 100.00% | 0 | NR | 0.00% | NR |
| 10 ⁰ | 48.6 ⁴ | 97.39% | 3 | NR | 0.00% | NR |
| 10 ⁰ | 39.3 ⁹ | 99.62% | 0 | NR | 0.00% | NR |
| 10 ⁰ | 40.4 ⁷ | 96.96% | 3 | NR | 0.00% | NR |
| 10 ⁰ | 20.3 ² | 98.80% | 0 | NR | 0.00% | NR |
| 10 ⁰ | 27.7 ⁷ | 94.10% | 2 | NR | 0.12% | NR |
| 10 ⁰ | 32.5 ⁵ | 90.97% | 3 | NR | 0.00% | NR |
| 10 ⁰ | 35.8 ⁹ | 94.33% | 0 | NR | 0.00% | NR |
| 10 ⁰ | 45.2 | 89.53% | 0 | NR | 0.00% | NR |
| 10 ⁰ | 40.67 ⁷ | 84.10% | 0 | NR | 0.00% | NR |
| 10 ⁰ | 45 | 89.95% | 0 | NR | 0.00% | NR |
| Percentage of cases (in-patient) wherein care plan with desired outcome is documented and countersigned by the clinician ⁿ | wherein screening for nutritional ward, AICU and needs have been done (Medical % of cases Pediatric) | % of cases wherein Nursing care plan is documented ^d | errors reported in Number of Radiology ^y | errors in Lab and No. reporting pathology ^y | in department of Rate of re-dos radiology ^y | lab and pathology Rate of re-dos in department ^t |
| | | | 6 | 7 | 8 | 9 |

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| | | | |
|---|---|---|-------------------------------|
| throughout the year. This is the overall Variability suggests challenges in values for CT, MRI & USG clinical correlation, possibly due | overall consistency is lacking- correlation. Peaks certain diagnostic | due to its real-time nature and utility in common conditions (e.g., abdominal, supporting clinical diagnoses, | Not reported from Jan to Dec- |
|---|---|---|-------------------------------|

| Reported | among modalities. interpretation or inconsistencies. MRI: Lowest concordance or reporting pathologies to complex | indicate potential CT: Like MRI, categories, but with moderate (e.g., 57.1%) strengths in | likely high reliability in USG: Strongest demonstrates correlation. Ultrasound obstetric) | |
|----------|---|---|---|----|
| 54.49% | 36.18% | 36.76% | 78.31% | NR |
| | | | | |
| 47.34% | 33.28% | 34.27% | 83.59% | NR |
| 45.75% | 32.47% | 28.13% | 85.21% | NR |
| 36.46% | 26.60% | 29.76% | 78.62% | NR |
| 40.67% | 34.27% | 34.31% | 81.01% | NR |
| 44.4% | 33.29% | 41.16% | 84.00% | NR |

| | | | | |
|--------|--------|--------|--------|----|
| 78% | | | | |
| 39.5% | 34.34% | 31.92% | 77.48% | NR |
| 68.3% | 39.63% | 57.14% | 75.45% | NR |
| 65.7% | 42.02% | 39.09% | 74.07% | NR |
| 69.24% | 41.86% | 43.61% | 76.72% | NR |
| 68.48% | 48.00% | 40.85% | 76.57% | NR |
| 63.73% | 33.41% | 28.88% | 74.00% | NR |
| 63% | 34.95% | 31.96% | 72.95% | NR |

| | | | | |
|---|--|--|--|--|
| 6 6 % | | | | |
| <p style="text-align: center;">clinical diagnosis correlating with % of reports of radiology department^f</p> | | | | <p style="text-align: center;">of patholog y & La^b clinic al diagn osis corre latin g with % of reports</p> |
| 1 0 | | | | 1 ¹ |

Quality Assurance Division

| November), except for December. year (from Jan. to throughout the Reported | Not reported from Jan to Dec· | Data from May, June & Dece mber are not report ed. | June & Dece mber are not report ed. Data from May, | Dece mber are not May, June and report ed. | May, June and December not reporte ^d | Not rep orte d fro m Jan to De c· | Not reported from Jan to Dec· | Not rep orte d fro m Jan to De c· | Not rep orte d fro m Jan to De c· |
|--|-------------------------------------|---|--|---|--|--|--|--|--|
| 100% | NR | 3.89% | 0.38% | 4.32% | 0.2 ⁸ | NR | NR | NR | NR |
| | | | | | | | | | |
| 100% | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| 100% | NR | 7.74% | 0.44% | 7.0 ⁵ | 0.6 ² | NR | NR | NR | NR |
| 100% | NR | 7.28% | 0.31% | 7.3 ¹ | 0.2 ⁸ | NR | NR | NR | NR |

| | | | | | | | | | |
|---|---|--|---|--|---|--|---|----------------------------------|--|
| 100% | NR | 7.49% | 0.53% | 6.1 ⁸ | 0.4 ⁷ | NR | NR | NR | NR |
| 100% | NR | 0.72% | 0.35% | 8.9 ⁸ | 0.1 ⁵ | NR | NR | NR | NR |
| 100% | NR | 0.50% | 0.46% | 2.5 ⁴ | 0.3 ⁶ | NR | NR | NR | NR |
| 100% | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| 100% | NR | NR | NR | NR | NR | NR | NR | NR | NR |
| 100% | NR | 3.92% | 0.34% | 1.8 ¹ | 0.2 ¹ | NR | NR | NR | NR |
| 100% | NR | 2.43% | 0.21% | 2.1 ¹ | 0.3 ⁴ | NR | NR | NR | NR |
| 100% | NR | 2.49% | 0.49% | 0.9 ³ | 0 | NR | NR | NR | NR |
| 100% | NR | 2.41% | 0.24% | 1.9 ⁹ | 0.1 ⁶ | NR | NR | NR | NR |
| safety precautions % of adherence to radiodiagnosis & working in the department of by employees imaging | safety precautions % of adherence to working in the pathology & lab department of employees | Incidence of medication error ^r | with adverse drug administration reactions ^s | prone abbreviations ^s of medication charts with error | developing adverse drug risk medications receiving high % of patients | % of medication diffe- sion plan | % of unplanned anaesthesia in OT ^T following | % of adverse events ^s | An estimated related mortality rate ^e |
| 1 ² | 1 ³ | 1 ⁴ | 1 ⁵ | 1 ⁶ | 1 ⁷ | 1 ⁸ | 1 ⁹ | 2 ⁰ | 2 ¹ |

Quality Assurance Division

| | | | |
|---|---|---|-------------------------------|
| Dentistry (no data inputs from these compliance from compliance from 100% Reporting | Dentistry (no data inputs from these compliance from compliance from 100% Reporting | reporting from July. Eye OT reported from June. Gynae Main OT started | Not reported from Jan to Dec- |
|---|---|---|-------------------------------|

| 50 % reporting ENT, Surgery, Eye, where as Orthopedic & departments). 0% reporting Gyne. | 50 % reporting ENT, Surgery, Orthopedic & departments). Eye, whereas 0% reporting Gyna. | July, October & OT reported for the months of December. | |
|--|---|--|---|
| 0.52% | 0.99% | 99.94% | NR |
| | | | |
| 0.00% | 0.00% | 99.57% | NR |
| 0.46% | 1.43% | 100% | NR |
| 0% | 1.04% | 100% | NR |
| 0.2 ¹ | 1.95% | 100% | NR |
| 0.59 ⁵ | 4.80% | 100% | NR |
| 1.1 ⁹ | 1.11% | 100% | NR |
| 4. ³ | 1.66% | 100% | NR |
| 0% | 0% | NR | NR |
| 0% | 0% | NR | NR |
| 0% | 0% | NR | NR |
| 0% | 0% | NR | NR |
| 0% | 0% | NR | NR |
| % of unplanned return to O ^T | % of rescheduling of surgeries ^S | site, wrong patient, wrong surgery have been adhered (SSI) events like wrong % of cases where prevent adverse | the specified time antibiotics within who received prophylactic appropriate % of cases |

| | | | |
|----------------|----------------|--------------------------------|-------------------|
| | | the hospital's procedure to | fram ^e |
| 2 ² | 2 ³ | 2 ⁴ | 2 ⁵ |

| | | | | | | | | |
|---|--|------|---------|---------|------|------|------------------|--|
| Dentistry (no data inputs from these compliance from compliance from compliance from 100% Reporting 50 % reporting ENT, Surgery, Orthopedic & departments). Eye, whereas 0% reporting Gyna. | Dentistry(no data inputs from these compliance from compliance from compliance from 100% Reporting 50 % reporting ENT, Surgery, Orthopedic & departments). Eye, whereas 0% reporting Gyna. | | | | | | | |
| 0.18% | 0.19% | 0.19 | 20.55 % | 79.45 % | 0.13 | 1.45 | 0.2 ¹ | |
| | | | | | | | | |
| 0.00% | 0.00% | 0.15 | 30.89 % | 69.11 % | 0.05 | 1.50 | 0.2 ⁵ | |
| 0.46% | 0% | 0.3 | 27.77 % | 72.23 % | 0.06 | 0.63 | 0.1 ¹ | |
| 0% | 0.70% | 0 | 23.13 % | 76.87 % | 0.22 | 0.69 | 0.2 ⁷ | |
| 0.84% | 0.21% | 0 | 22.19 % | 77.81 % | 0.41 | 1.93 | 0.4 ⁵ | |

| | | | | | | | | |
|--|----------------------------------|---|---|---|----------------|---|----------------------|--|
| 0.20% | 0.40% | 0 | 17.84 % | 82.16 % | : 36 | 0.05 | 1.51 | 0.2 ⁰ |
| 0% | 0.30% | 0.42 | 36.14 % | 63.86 % | | 0.25 | 1.44 | 0.2 ⁵ |
| 0.66% | 0.66% | 0.73 | 13.60 % | 86.40 % | 0 : 4 | 0.17 | 1.79 | 0.1 ⁴ |
| 0.00% | 0.00% | 0 | 9.29% | 90.71 % | 7 : 52 | 0.16 | 2.59 | 0.3 ⁷ |
| 0.00% | 0.00% | 0.26 | 11.68 % | 88.32 % | | 0.05 | 2.06 | 0.1 ⁷ |
| 0.00% | 0.00% | 0 | 25.08 % | 74.92 % | 1 : 2 | 0.08 | 1.02 | 0.0 ⁰ |
| 0.00% | 0.00% | 0.25 | 11.10 % | 88.90 % | 1 : 46 | 0.07 | 1.46 | 0.1 ⁷ |
| 0.00% | 0.00% | 0.22 | 17.92 % | 82.08 % | | 0.00 | 0.80 | 0.1 ¹ |
| which the planned surgery is changed intraoperatively % of cases in | Re-exploration rate ^e | % of transfusion reactions ^s | % of waste of blood & blood components ^s | % of blood component usage ^e | Statistics | Catheter-associated urinary tract infection (CAUTI) | Pneumonia rate - VAP | associated blood stream infection Central line (CLABS I) |
| 2 ⁶ | 2 ⁷ | 2 ⁸ | 2 ⁹ | 3 ⁰ | 3 ¹ | 3 ² | 3 ³ | 3 ⁴ |

Quality Assurance Division

| | | | | | | | |
|--|-------------------------|--|------------------------------|---|---------------------------|---|---|
| Not reported for the month of May, June and December | 100% reporting from MRD | NICU for the month of Oct, Nov, Dec- all the ICU except compliance from 100% reporting | Not reported from Jan to Dec | all the ICUs except from NICU for the month of Oct, compliance from 100% reporting Nov, Dec | 100% reporting compliance | no data from BMES for the month 83.33% reporting BMES, However compliance from November & from HIMS & 0% reporting compliance December. | Data reported from Jan. to August. till December for since September Not reported BMES. |
| 0.5 ⁶ | 3.12 | 0.9 ² | NR | 3.4 ⁷ | 3.40% | 88.97% | 54.71% |
| | | | | | | | |
| NR | 2.65 | 0 | NR | 6.98 ⁴ | 0.96% | NR | NR |
| 0.4 ⁴ | 3.11 | 0.6 ¹ | NR | 5.6 ⁶ | 1.59% | NR | NR |
| 0.2 ⁰ | 2.47 | 0 | NR | 1.4 ² | 1.59% | 83.33% | NR |
| 0.6 ⁷ | 3.06 | 2.1 ¹ | NR | 9.9 ⁴ | 3.18% | 87.50% | NR |
| 0.5 ⁴ | 3.01 | 1.2 ⁸ | NR | 1.5 | 8.60% | 83.33% | 69.92% |
| 0.7 ² | 2.44 | 0.8 ³ | NR | 2.49 ⁵ | 9.55% | 77.78% | 45.75% |
| NR | 3.68 | 1.2 ⁸ | NR | 1.4 ⁵ | 3.59% | 90.91% | 51.58% |
| NR | 4.79 | 3.3 ² | NR | 0.4 ² | 2.63% | 91.11% | 50.42% |
| 0.7 ⁷ | 3.27 | 0 | NR | 0.4 ⁹ | 2.87% | 96.50% | 52.50% |
| 0.5 ³ | 2.84 | 1.6 ⁹ | NR | 1.3 ⁶ | 2.63% | 90.97% | 53.33% |
| 0.9 ⁷ | 3.80 | 0 | NR | 0 | 2.39% | 90.32% | 56.67% |

| | | | | | | | |
|-------------------------------|-----------------------------|--|--|---|---|---|--|
| 0.17 | 2.28 | 0 | N ^R | 1 ⁰ | 1.20% | 97.97% | 57.50% |
| Surgical site infection (SSI) | Mortality rate ^e | PICU, HDU, CCU, SICU) within 48 hours (AICU, NICU, Return to ICU | similar presenting emergency within 72 hours with complaint ^s Return to | Reintubation rate in ICU (AICU, NICU, PICU, HDU, CCU, SICU) | levels in medical Drugs reorder stor ^e | maintenance within one working day HIMD and BME ^D with regards to for completion Response time of reactive | (B-type & D-type) Reorder level for Medical Gases |
| 3 ⁵ | 3 ⁶ | 3 ⁷ | 3 ⁸ | 3 ⁹ | 4 ⁰ | 4 ¹ | 4 ² |

Quality Assurance Division

| | | | | | | | |
|----------------------------|-------------------------------|---|--|--|--|---|--|
| 100% reporting compliance. | Not reported from Jan to Dec- | no data from BMES for the month 83.33% reporting BMES, However compliance from Jan to Dec- of November & Not reported by HIMS & December. | compliance by the 50% reporting Procurement. | Data reported from January to April and from July to November. | 100% data report compliance from CMS Unit. | Procurement from July to December. Data reported by | NOT DONE BY PLANNING OFFICE ^E |
| 0% | N ^R | N ^R | 0.049% | 1.0 ² | 0% | 0.04 ⁶ | N ^R |
| 0 | N ^R | N ^R | 0.02% | N ^R | 0 | 0.02 ⁴ | NOT DONE BY PLANNING OFFICE ^E |
| 0 | N ^R | N ^R | 0.11% | 1.1 ⁶ | 0 | 0.1 ¹ | |
| 0 | N ^R | N ^R | 0.03% | 1.1 ⁶ | 0 | 0.02 | |
| 0 | N ^R | N ^R | 0.09% | 0.9 ³ | 0 | 0.08 | |

| | | | | | | | |
|---|--|---|---|--|---|---|--|
| 0 | NR | NR | 0.04% | 0.4 ⁶ | 0 | 0.03 ⁷ | NOT DONE BY PLAN NING OFFI CE |
| 0 | NR | NR | 0.01% | 0.9 ³ | 0 | 0.00 ⁸ | |
| 0 | NR | NR | NR | NR | 0 | NR | |
| 0 | NR | NR | NR | NR | 0 | NR | |
| 0 | NR | NR | NR | 0.9 ¹ | 0 | NR | |
| 0 | NR | NR | NR | 1.6 | 0 | NR | |
| 0 | NR | NR | NR | 1.1 ⁴ | 0 | NR | |
| 0 | NR | NR | NR | 0.9 ¹ | 0 | NR | |
| radio-dia gnosis & in department of of consum ables Unavailabi lity imaging | in depart ment of of cons uma bles patholog y & La ^b Unavail ability | Unavailability of dental department ^t consumables in | procu red by local % of drugs & cons uma bles purchas ^e | emerge ncy drug ^s outs including % of stock | rejected before preparati on of % of drugs & consum ables GR ^N | % of variatio ns procu remen t from the proces ^s | observ ed in mock No. of varia tions drill ^s |
| 4 ³ | 4 ⁴ | 4 ⁵ | 4 ⁶ | 4 ⁷ | 4 ⁸ | 4 ⁹ | 5 ⁰ |

Quality Assurance Division

| | | | | | | | |
|---|---|---|--|--|--|---|--|
| Jan. to April and for the month of July reported data from Administra tion | Jan. to April and for the month of July reported data from Administra tion | Not report ed from Jan to Dec· | | | Gyna OT reported only(July, August, OT reported for 5 months only(July till November) & 100% reporting Compliance for Main OT, Eye November & | compliance from all the ICUs except by NICU for the month of Oct, Nov, Dec· 100% reporting | except for NICU for the month of Jan, Feb, March, April, intensive care unit May, July, August· |
|---|---|---|--|--|--|---|--|

| Nursing only. | Nursing only. | | | | for 4 months December) | | 100% reporting from all the |
|-----------------------------------|--|--|--------------------------------------|------------------------------|---------------------------------|---|--|
| 0.6 | 11.8 | NR | 9.4 day ^s | 74. 45 % | 59.63% | 36.5 ² | 79.6 ⁷ |
| | 5 ⁹ | | | | | | |
| NR | NR | NR | 11.8 ⁷ | 80. 86 | 51.04% | 55.2 ⁰ | 85.3 ⁸ |
| NR | NR | NR | 11.41 ⁵ | 75. 23 | 61.61% | 46.5 ⁴ | 83.96 ² |
| NR | NR | NR | 10.96 | 69. 99 | 54.16% | 33.1 ⁰ | 67.82 ⁹ |
| NR | NR | NR | 10.50 ⁵ | 66. 5 | 61.02% | 35.3 ⁵ | 82.1 ⁶ |
| NR | NR | NR | 10.0 ⁵ | 71. 6 ³ | 78.13% | 39.7 ⁹ | 84.63 ² |
| 0 | 9 | NR | 9.59 ⁵ | 74. 46 | 75.00% | 30.2 ⁸ | 78.47 ⁸ |
| NR | NR | NR | 9.14 | 71. 2 ³ | 48.48% | 26.6 ⁹ | 70.5 ⁶ |
| NR | NR | NR | 8.68 ⁵ | 79. 6 ⁵ | 60.00% | 32.7 ⁹ | 84.1 ³ |
| 1 | 11 | NR | 8.2 ³ | 85. 0 ¹ | 57.64% | 40.2 ⁸ | 89.5 ⁵ |
| 2 | 16 | NR | 7.5 ⁴ | 82. 4 ⁵ | 56.06% | 38.1 ⁶ | 89.29 ⁶ |
| 0 | 12 | NR | 7.7 ⁹ | 71. 6 ² | 55.56% | 29.6 ⁴ | 68.6 ² |
| 0 | 11 | NR | 6.6 ³ | 64. 7 ⁴ | 56.88% | 30.4 ⁰ | 71.52 ⁸ |
| Incidence of fall ^s | hospital associated pressure ulcer after admissio ⁿ | % of staff provi ded pre-e | Aver age lengt h of stay | Be d occ upa ncy | OT utilization rat ^e | ICU utilization rate (Equipment) | ICU utilization rate (Bed utilization) |

| | | | | | | | |
|----------------|----------------|---------------------|------------------|----------------|----------------|----------------|----------------|
| | Incidence of | xposure prophylaxis | (Number in days) | rate (%) | | | |
| 5 ¹ | 5 ² | 5 ³ | 5 ⁴ | 5 ⁵ | 5 ⁶ | 5 ⁷ | 5 ⁸ |

Quality Assurance Division

| | | | | | | | | | | | |
|---|---|--------|--------|------------------------|--|-------------------|-----------------------------|--|--------------|--------------------------------------|---|
| September, October, November & Not reported for December. | and done for July January till April Reported from month. | | | | 100% reporting compliance ^e | KPI not included. | Not reported at all by HRD. | compliance. Did not report for the first 6 months of the year. 50% reporting | Not reported | Not reported from Jan to Dec by HRD. | |
| 264.7 ⁵ | 1:3 | 84.01% | 91.19% | 18.2 days ^s | 0:33:04 | NA | NR | 1.27% | NR | NR | |
| 211 ⁸ | | | | | | NA | | | | 0 | 1 |
| NR | NR | 82.67% | 92.06% | 21.2 | 0:27:07 | NA | NR | 1.28% | NR | NR | 0 |
| NR | NR | | | | | | | 0.22% | NR | | 0 |
| NR | NR | | | | | | | 0.67% | NR | | 0 |
| NR | NR | | | | | | | 0.55% | NR | | 0 |
| 77 ⁴ | NR | | | 0.68% | | | | NR | 0 | | |
| 112 ⁸ | 1:2 | | | 1.02% | | | | NR | 1 | | |
| 0 | NR | 85.34% | 90.32% | 16.9 | 0:39:00 | NA | NR | NR | NR | NR | 0 |
| 12 ⁰ | NR | | | | | | | NR | NR | | 0 |

| | | | | | | | | | | | |
|--|--|------------------------|------------------------|---|--|---------------------------------------|-----------------------------|--------------------------------------|-------------------|---|---|
| 2 ⁴ | 1:3 | | | | | NA | | NR | NR | | 0 |
| 2 ⁴ | 1:3 | | | 13.5 | | NA | | NR | NR | | 0 |
| 2 ⁴ | 1:3 | | | | | NA | | NR | NR | | 0 |
| 2 ⁴ | 1:3 | | | | | NA | | NR | NR | | 0 |
| Critical equipment downtime ^e | ratio for ward and Nurse - patient ICU | OPD satisfaction index | IPD satisfaction index | imaging (Number radiodiagnosis & for services for Department of Waiting time of days) | OPD consultation Waiting time for (in Minutes) | Time taken for discharge ^e | Employee satisfaction index | Employee attrition rate ^e | Staff absenteeism | responsibilities and welfare scheme ^s who are aware of employee rights, % of employees | analyzed within the time frame ^e Number of sentinel events reported, collected and |
| 5 ⁹ | 6 ⁰ | 6 ¹ | 6 ² | 6 ³ | 6 ⁴ | 6 ⁵ | 6 ⁶ | 6 ⁷ | 6 ⁸ | 6 ⁹ | 7 ⁰ |

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| | | | | | | | | | |
|---|---|------|----|-------|------|-------|-------|--------|--|
| | | | | | | | | | <p>Dermatology & Eye had 100% reporting compliance.</p> <p>Pediatric & Gynae had 50% reporting</p> <p>Medicine, ENT, Orthopedic had 0% reporting compliance.</p> <p>compliance.</p> <p>Surgery &</p> |
| 0 | 1 | 0.50 | 3 | 0.01% | 0.0% | 0.00% | 0.00% | 91.14% | 89.11% |
| 0 | 6 | 6 | 40 | | | | | | |
| 0 | 1 | 0 | 2 | 0.12% | 0.0% | 0.00% | 0.00% | 99.18% | 100% |

| | | | | | | | | | |
|---|---|---|---|---|---|--|---|--|---|
| 0 | 0 | 0 | 3 | 0.00% | 0.0% | 0.00% | 0.0 | 97.86% | 100% |
| 0 | 2 | 0 | 4 | 0.00% | 0.0% | 0.00% | 0.0 | 97.91% | 100% |
| 0 | 1 | 0 | 6 | 0.00% | 0.0% | 0.00% | 0.0 | 99.28% | 100% |
| 0 | 0 | 0 | 4 | 0.00% | 0.0% | 0.00% | 0.0 | 98.71% | 100% |
| 0 | 0 | 3 | 3 | 0.00% | 0.0% | 0.00% | 0.0 | 97.03% | 100% |
| 0 | 1 | 0 | 4 | 0.00% | 0.0% | 0.00% | 0.0 | 88.65% | 83% |
| 0 | 0 | 0 | 3 | 0.00% | 0.0% | 0.00% | 0.0 | 86.44% | 75% |
| 0 | 0 | 2 | 1 | 0.00% | 0.0% | 0.00% | 0.0 | 85.21% | 76% |
| 0 | 1 | 0 | 6 | 0.00% | 0.0% | 0.00% | 0.0 | 78.90% | 81% |
| 0 | 0 | 1 | 2 | 0.00% | 0.0% | 0.00% | 0.0 | 74.27% | 86% |
| 0 | 0 | 0 | 2 | 0.00% | 0.0% | 0.00% | 0.0 | 90.26% | 68% |
| % of blood fluid expos ures (IPD) Incid ence of | blood body fluid expos ures (OPD) Incid ence of | blood body fluid expos ures (OPD) Incid ence of | Numbers (/month) Inciden ces of needl e stick injury es (in | records not having discharg e summar y or incompl et ^e % of medica | records not having codificat ion as per ICD % of medical | incompl ete consent recor ds havi ng % of medical impro per/or | % of mis sin g rec ord s | shift change among nurse ^s hand overs durin g Approp riate | shift change among doctor ^s handovers during Appropriate |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |

Quality Assurance Division

| | | | | | | | | |
|-------|--------|------|---------------------------------------|-------|---|---|---------------------|---|
| | | | Did not report from January till May. | | compliance. Did not report for the last 6 months. 50% reporting | Derma, Eye, Ped. compliance from Medicine, ENT, 100% reporting Orthopedic had & psychiatric. 0% reporting compliance. Surgery & | | December was not from all the wards, except for NICU, from October till 100% reporting where the data reported. |
| 0% | 89.43% | 100% | 37.45% | 0.00% | 88.50% | 91.88% | 89.947 ⁵ | 12.8 ² |
| | | | | | | | | |
| 0.00% | 90.58% | 100% | NR | 0.00% | NR | 92.97% | 93.5 ⁹ | 17.4 ⁸ |
| 0.00% | 91.73% | 100% | 40.31% | 0.00% | NR | 96.70% | 99.5 ⁴ | 9.8 ⁵ |
| 0.00% | 89.93% | 100% | 31.44% | 0.00% | NR | 94.74% | 99.0 ⁹ | 12.6 ⁶ |
| 0.00% | 88.18% | 100% | 44.96% | 0.00% | NR | 96.42% | 98.9 ⁶ | 15.3 ⁹ |
| 0.00% | 84.25% | 100% | 36.53% | 0.00% | NR | 93.84% | 99.3 ⁸ | 10.2 ¹ |
| 0.00% | 91.70% | 100% | 32.42% | 0.00% | NR | 86.69% | 97.3 ³ | 9.6 ⁹ |
| 0% | 91.31% | 100% | 39.09% | 0.00% | 88.66% | 93.48% | 93.5 ⁹ | 13.0 ⁵ |

| | | | | | | | | | | | | | | | | | | | |
|--------------------------------|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------|-------------|----------------------------|-----------------------|------------------|-------------|-------------|-------------|------------------|-----------------------|-----------------------|------------------|
| | | 7 8 | 6 6 | 1 7 | 8 9 | 8 9 | 9 8 5 | 7 1 | 4 4 | 6 9 5 | 0 6 7 5 | 3 1 | 5 | 4 0 5 | 4 8 | 1 2 0 5 | 7 6 5 | 2 7 5 | 1 7 |
| Clean Linen | 1 0 0 | 7 7 | 7 5 | 9 6 | 8 6 | 1 0 0 | 8 1 | 7 5 | 1 0 0 | 8 8 5 | 9 4 2 | 7 9 | 1 0 0 | 9 1 | 9 9 | 9 7 2 | 8 9 8 | 8 2 7 8 | 8 9 7 5 |
| Clean Toilet | 1 0 0 | 8 8 | 8 3 | 9 6 | 8 0 | 5 0 | 8 0 | 7 7 | 9 4 | 7 9 4 | 8 6 2 5 | 8 6 | 1 0 0 | 7 0 | 9 9 | 9 5 3 5 | 8 8 4 3 5 | 7 5 8 3 5 | 8 5 2 4 |
| Clean Ward | 1 0 0 | 8 8 | 9 1 | 9 3 | 8 6 | 8 8 | 8 0 | 7 3 | 9 4 | 8 4 1 5 7 5 | 8 9 6 4 2 | 9 2 | 1 0 0 | 1 4 5 | 1 0 0 | 9 7 2 | 9 4 9 7 | 8 8 6 1 | 9 4 |
| Friendliness of Cleaner | 1 0 0 | 1 0 0 | 9 1 | 8 8 | 9 1 | 1 0 0 | 8 6 | 7 7 | 1 0 0 | 9 0 7 | 9 5 3 5 | 8 6 8 5 | 9 5 | 9 2 | 9 0 | 9 3 3 5 | 8 4 2 4 5 | 9 0 5 5 | 9 2 1 |
| Friendliness of doctors | 1 0 0 | 1 0 0 | 1 0 0 | 1 0 0 | 8 8 | 1 0 0 | 9 6 | 8 0 | 1 0 0 | 9 4 8 | 9 7 2 5 | 8 7 7 5 | 4 5 | 9 4 | 9 9 | 9 4 1 | 9 6 8 | 9 5 2 7 5 | 9 3 |
| Friendliness of nurse | 9 1 6 6 5 | 1 0 0 | 1 0 0 | 1 0 0 | 9 4 4 | 1 0 0 | 9 5 | 8 0 | 1 0 0 | 9 4 4 5 | 9 7 2 0 5 | 9 0 | 1 0 0 | 9 6 | 9 9 | 9 7 2 | 9 8 0 4 | 9 6 6 5 | 9 6 1 |

| | | | | | | | | | | | | | | | | | | | |
|---------------------------|------|-----------|-----|-----|------------|------------|------|---------|---------|----------|----|-----|---------|-----------|---------|------------|-----|---------|----|
| Prom to Complaints | 100 | 88 | 100 | 93 | 91 | 88 | 91 | 82 | 100 | 90 | 95 | 86 | 100 | 91 | 100 | 92 | 98 | 88 | 93 |
| Noise | 100 | 88 | 83 | 90 | 83 | 83 | 85 | 71 | 100 | 83 | 91 | 75 | 95 | 74 | 97 | 87 | 83 | 88 | 87 |
| Privacy | 100 | 88 | 83 | 100 | 91 | 94 | 91 | 66 | 100 | 88 | 94 | 87 | 100 | 95 | 98 | 92 | 93 | 91 | 93 |
| Info on care | 91 | 88 | 100 | 100 | 86 | 94 | 92 | 22 | 100 | 89 | 94 | 82 | 100 | 95 | 100 | 97 | 94 | 90 | 93 |
| Promptness | 100 | 88 | 83 | 100 | 88 | 100 | 91 | 77 | 100 | 92 | 96 | 83 | 95 | 91 | 91 | 95 | 92 | 92 | 92 |
| Clarity | 96 | 100 | 66 | 100 | 83 | 78 | 83 | 78 | 94 | 93 | 93 | 84 | 100 | 96 | 99 | 93 | 93 | 87 | 90 |
| UNIT | SICU | Diagnosis | PER | CU | Medication | Medication | Care | Surgery | Surgery | Ordering | AI | HDU | On-call | Physician | Bedside | Management | ENR | OVERALL | |

| | | | | | | | | | | | | | | | | | |
|----|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|
| | | s | | | 1 | 2 | | 1 | 1 | d | | | y | t | g | | M |
| | | | | | | | | | | i | | | | r | | | A |
| | | | | | | | | | | c | | | | i | | | |
| | | | | | | | | | | s | | | | c | | | |
| SN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |

Quality Assurance Division

2. Outpatient satisfaction survey report

The survey is conducted biannually, therefore the results presented here is the average of both the surveys. The first survey was conducted in March 2025 and the second in the month of October 2025. The overall satisfaction of the OPD service users in JDWNRH in the year 2025 was 89.56 %, interpreted as Very good.

| SN. | DEPT | Satisfaction | Interpretation | Percentage (%) |
|-----|---------------|--------------|----------------|----------------|
| 1 | Ophthalmology | 2.88 | Excellent | 95.93 |
| 2 | Physiotherapy | 2.88 | Excellent | 95.93 |
| 3 | Gynacology | 2.88 | Excellent | 95.93 |
| 4 | Pediatrics | 2.67 | Very good | 89.195 |
| 5 | Medical | 2.77 | Excellent | 92.5625 |
| 6 | ENT | 2.76 | Excellent | 90.87875 |
| 7 | Orthopedics | 2.48 | Very good | 82.86 |
| 8 | Radiology | 2.62 | Very good | 87.435 |
| 9 | Diabetes | 2.63 | Very good | 87.72 |
| 10 | Dermatology | 2.15 | Very good | 83.89 |
| 11 | GOPD | 2.05 | Very good | 83.5 |
| 12 | Surgical | 2.46 | Very good | 82.09 |
| 13 | Dental | 2.63 | Very good | 87.655 |
| 14 | Psychiatric | 2.77 | Excellent | 92.275 |
| 15 | Dialysis | 2.67 | Excellent | 89.24 |
| 16 | CHD | 2.79 | Excellent | 93.035 |

| | | | | |
|----|-------------------------|------|-----------|-------------|
| 17 | Pharmacy | 2.64 | Very good | 88.01 |
| 18 | Emergency | 2.56 | Very good | 85.265 |
| 19 | MCH ER | 2.85 | Excellent | 95 |
| 20 | Oncology | 2.94 | Excellent | 98 |
| 21 | Blood sample collection | 2.54 | Very good | 84.56 |
| | | | | 89.56958333 |

Quality Assurance Division

3. OPD waiting time survey

As mandated the OPD waiting time survey is also conducted biannually. Except for two departments which executed a full appointment system in the OPD namely medical and Ophthalmology department, the values presented in the table below for the other departments are the average of two surveys conducted in 2025. The Lifestyle related disease unit has the longest waiting time of 1 hour 6 minutes and 16 seconds.

| SN | DEPT | AVERAGE WAITING TIME | AVERAGE CONSULTATION TIME | Remarks |
|----|---------------|----------------------|---------------------------|-----------------|
| 1 | Orthopedic | 0:45:38 | 0:07:45 | |
| 2 | ENT | 0:12:25 | 0:06:49 | |
| 3 | Dental | 0:39:41 | 0:16:24 | |
| 4 | Surgery | 0:12:36 | 0:08:11 | |
| 5 | Physiotherapy | 0:05:27 | 1:03:57 | |
| 6 | Pediatrics | 0:19:20 | 0:05:00 | |
| 7 | LSRD | 1:06:16 | 0:09:42 | |
| 8 | Medical | 0:04:39 | 0:08:00 | Only one survey |
| 9 | Dermatology | 0:31:53 | 0:11:35 | |
| 10 | CHD | 0:19:05 | 0:15:24 | |
| 11 | Gyna | 0:39:28 | 0:10:52 | |

| | | | | |
|----|---------------|---------|---------|-----------------|
| 12 | Psychiatric | 0:11:42 | 0:08:38 | |
| 13 | GOPD | 0:44:43 | 0:06:34 | |
| 14 | Ophthalmology | 0:15:55 | 0:16:00 | Only one survey |

Quality Assurance Division

| | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---|--------------------------------------|------------------------|----------------|----------------|-----------------------|---|---|---|---|--------------------------------------|---|--------|------------------|--------------|---|----------------------|----------------------|----------|----------|
| 4 | D t h Q u a r t e r | Pro ced ure tim e : 2 0 | 0 : 1 4 : 2 0 | S a m e d a y | Onl in ^e | N ^A | 0:3 | 00: | 0 | - | 0 | 0 | 0 | 0 | 0 | 0 | 0 | A | 0:1 | D | 0:1 | 0:1 |
| | | | | | | | 9:5 0 | 11: 4 ⁹ | : | : | : | : | : | : | : | : | : | : | : | : | : | : |
| | | Wai ting tim e : 4 2 2 a y s | 1 6 : 4 2 2 a y s | 2 1 : 2 d a y s | 4.9 8 day s | N ^R | N ^A | | | | | | 8 : 7 2 d a y s | . | N A | 2 0 2 1 | 1 da y | D | 1.7 4 day s | 1.8 8 day s | | |
| 3 | Q u a r t e r | Pro ced ure tim e : 4 5 | 0 : 1 1 : 4 5 | S a m e D a y | Onl in ^e | N ^A | 0:4 | 00: | 0 | - | 0 | 0 | 1 | 0 | 0 | 0 | 0 | A | 0:1 | D | 0:1 | 0:3 |
| | | | | | | | 1:3 6 | 10: 2 ³ | : | : | : | : | : | : | : | : | : | : | 3:2 8 | i | 6:3 0 | 2:0 0 |

| | | | | | | | |
|--------------------------------------|--------------------------------------|---------------------------------|----------------------|--------------------------------------|---------------------------|---|----------------------|
| 1 . 6 d a y s | 1 . 6 d a y s | 8 9 7 d a y s | NA | 3 . 2 5 d a y s | 3.6 1 2 day s | NA | NA |
| NA | NA | NA | NA | NA | NA | 5 8 . 9 2 d a y s | 15. 3 day s |
| 1 . 8 6 d a y s | 1 . 8 6 d a y s | 7 9 d a y s | 14. 4 day s | 4 . 5 d a y s | 2.8 9 day s | NA | NA |
| NA | NA | NA | NA | NA | NA | 5 5 . 4 4 d a y s | 8.0 9 day s |
| 6 d a y s | 6 d a y s | 2 1 d a y s | NA | NA | NA | NA | NA |
| NA | NA | - R e | -Sp eci aliz | - U r | - Pr iv | NA | NA |

| | | | | | | | |
|--------------------------------------|----------------------------|-----------------------|------------------------|------------------|---|--|--|
| | | g u l a r | ed Stai nin g | g e n t | at e Cl ini c | | |
| C y t o l o g y | Histopatholog ^y | | | | D e n t a l A c r y l i c | De ntal cro wn and bri dg ^e | |
| 1 0 | 1 ¹ | | | | 1 2 | 1 ³ | |

Quality Assurance Division

| | | | | | | | | | | | | | | | | |
|---------------------|--|---|--|---|--|--|--|--|--|--|--|--|--|---|---|--|
| Remark s | Ad mi nist rati ve Div isio ns/ Uni ts (OI d Ho spit al Bui ldi | Bot h surv ey wer e not don e for the 1st bi-a nual surv ey- | Bot h sur vey wer e con duc ted for the mai n fina nce offi ce | Bot h sur vey s wer e con duc ted at the Ge ner al Sec tion | N o t was d o n e for all the unit s & roo ms of HI MS . | Sur vey was con duc ted for the two roo ms of tw o MS . | Su rv ey wa s con duc ted for two roo ms of the Pro cur em | Sur vey wa s con duc ted for two roo ms of the Pro cur em | N o t was d o n e for all the unit s & roo ms of HI MS . | N o t was d o n e for all the unit s & roo ms of HI MS . | N o t was d o n e for all the unit s & roo ms of HI MS . | N o t was d o n e for all the unit s & roo ms of HI MS . | N o t was d o n e for all the unit s & roo ms of HI MS . | Surv ey was con duc ted for 3core areas of the depar tmen t whic h inclu des | bi-an nual surve y was done for the New MCH OT only. Not done for the 1st bi-an | S u r v e y w a s d o n e f o r t h e P r o c u r e m e n t |
|---------------------|--|---|--|---|--|--|--|--|--|--|--|--|--|---|---|--|

| | ng) | wit h cub icle s. | nea r AD M's offi ce. | i - a n n u a l s u r v e y | | off ice s. | ent. | i - a n n u a l s u r v e y | i - a n n u a l s u r v e y | i - a n n u a l s u r v e y | i - a n n u a l s u r v e y | i - a n n u a l s u r v e y | | AIC U, HDU & SICU | nual surve y. 2nd | a b i n A & C a b i n B | |
|---|-----|-------------------------------|--------------------------------------|--|----------------------------|------------------|--------------------|--|--|--|--|--|----------------------------|-------------------------------|----------------------------|--|----------------------------|
| Average^e | | 52.5 3% | 52. 81 % | 59. 23 % | 4 7 . 7 4 % | 53. 76 % | 56 .0 8 % | 70 % | 4 4 . 5 8 % | 6 6 . 3 4 % | 5 7 . 9 2 % | 5 3 . 8 9 % | 5 4 . 7 9 % | 6 0 . 2 1 % | 94.31 % | 93.20 % | 9 5 . 7 9 % |
| 2ⁿ Bi-annu al Surve^y | | 52.5 3% | 41. 86 % | 52. 82 % | 4 7 . 7 4 % | 43. 64 % | 45 .2 7 % | 55. 40 % | 4 4 . 5 8 % | 6 6 . 3 4 % | 5 7 . 9 2 % | 5 3 . 8 9 % | 5 4 . 7 9 % | 5 1 . 4 0 % | 88.61 % | 93.20 % | 9 3 . 4 5 % |
| 1^s Bi-annu al Surve^y | | - | 63. 75 % | 65. 63 % | - | 63. 88 % | 66 .8 8 % | 85 % | - | - | - | - | - | 6 9 . 0 3 % | 100% | - | 9 8 . 1 3 % |

| | | | | | | | | | | | | | | | | | |
|----------------------------------|---|---|--|--|--|--|---|--|---|---|---|---|--|---|--|---|----------------------------|
| Unit Name^e | | EP BA X Swi tchi ng Unit ^t a) | Fin anc e Div ision n b) | Ge ner al Ad min istr atio n Sec tio ⁿ c) | H a r d w ar e S er v ice s (H I M S) e) | H o s pi tal in fr as tr uc tu re & M ai nt en an ce Se r v ice s (H I M S) e) | H u m an Re so ur ce s Di vi sion (H R D) f) | Pro cur em ent ^t g) | R e c e p t i o n a r e a h) | R e c e p t i o n a r e a h) | R e c e p t i o n a r e a h) | R e c e p t i o n a r e a h) | S e r v i c e s j) | O p e r a t i o n a l A c t i v i t y k) | Adult Critic al Care Depar tment ^t | Anest hesia Depar tment ^t | C a b i n s |
| S^N | 1 | | | | | | | | | | | | | | 2 | 3 | 4 |

5S CQI Survey

5.

| | | | | | | | | |
|--|--|--|--|--|--|--|--|--------|
| Survey was done for the main CMS store room. | New-born Examination Room, EPI, Lactation Mang. Unit, Family Planning OT, Oral Health Clinic, Colposcopy, HPV Screening, HIV which included 24 units and rooms in total like Reception, Pharmacy, ANC, Doctor's Screening, Service Coordination Room & Survey was done for all the units of CHD Planning, PNC, Playful parenting room, chamber, AFHS, USG, VCT, Lab, ANC Women's Health Physio, PNC, Family HODs room. | De cores areas like Dental clinic s/OPDs, Imaging room & Dental s/OPDs, Store . 2nd bi-annual survey was conducted for 3 | Both the survey was conducted for the core areas like Dental Clinic s/OPDs, Acrylic Lab & Crown & Bridge labs. | 1st bi-annual survey conducted for the core areas like the Dental Clinic s/OPDs, Department at the Old Hospital Building | Survey was done for 3 Departments OPD room and procedure room. | Diagnosis was conducted for Storer room and the Main duty station of the Survey was done for the core areas like | Treatment room, General area and Store room of the unit. Survey was done for the core areas like | |
| 69.95% | 98.25% | 61.30% | 84.09% | 76.4% | 93.39% | 91.02% | 82.35% | 86.69% |
| 61.45% | 96.50% | 61.30% | 88.07% | 72.7% | 88.03% | 85.5% | 70.95% | 78.23% |
| 78.44% | 100% | Not done ^e | 80.10% | 80.10% | 98.75% | 91.62% | 93.75% | 92.69% |

| | | | | | | | | | |
|--|---|---|---|---|--|------------------------------------|---------------------------------------|------------------------------------|--|
| Ce ntr al Me dic al Sto re (C MS) | Community Health Department ^t | | a)Den tal (Old Hospi tal Buildi ng) | b) Dental (New Hospit al Buildi ng) | Ove rall Ave rag ^e | Der mat olo gy OP D | Dialy sis OP ^D a) | Dialys is IP ^D b) | Over all Aver ag ^e |
| 5 | 6 | 7 | | | | 8 | 9 | | |

Quality Assurance Division

| | | | | | | | |
|---|---|---|--|--|--|--|--|
| room, Triage area with Dressing room & New MCH Emergen cy. Survey was conduct ed for 4 core areas which include AMC Room 1&2, Resuscit ation | & Speec h Unit, ENT Clinic s/OP Ds & ENT the Depa rtmen t whic h inclu des Audi ology Survey was conduct | Surve y was done for all the rooms and units of the Forens ic Depart ment at the Old Hospi tal Buildi ng. | Survey was done for 2 core areas of the partme nt which includ es GOPD chamb ers & GOPD pre-ch eckup room. | 1st bi-annual survey was not done. 2nd bi-an nual survey was conducted for 5 core areas, which includes Birthing Centre, Maternity Ward, Gynecolo gy Ward, Gynae. Clinics/ OPDs & New MCH | of the department which includes Blood Bank with Blood Donation room, Histopatholog y Sample/Blood Collection & Unit, CHD Lab, Unit, TB Lab, Cytology Unit, Biochemistry Survey was conducted for the 12 core areas Lab, Hematology Unit, | Surv ey was done for the all the roo ms of the Diab etic Clin ic. | ward, Endoscop y Unit, Medical Ward 1 & 2, Medical OPDs, Cath Lab & ECG + ECHO Survey was done for core areas like CCU Unit. |
|---|---|---|--|--|--|--|--|

| | | | | | | | |
|---|--|---|---|--------------------------------------|--|--|---------------------------------------|
| | ed for 3 core areas of (with Derma) Ward. | | | Cabins. | Microbiolog y Unit, MCH Sample collection Unit. | | |
| 83.21% | 86.77% | 94.88% | 87.52 % | 91.52% | 93.51% | 90.8 8% | 90.30% |
| 80.53% | 87.64% | 90.35% | 82.39 % | 91.52% | 90.92% | 85.0 5% | 87.31% |
| 85.89% | 85.89% | 99.40% | 92.65 % | Not don ^e | 96.09% | 96.7 1% | 93.29% |
| Emergen cy Departme n ^t | ENT Departme n ^t | Forensi c Depart ment ^t | Genera l Outpat ient Depart ment (GOP D) | Gynecology Departmen ^t | Laboratory & pathology Departmen ^t | Life- style Rela ted Dise ase (LS RD) Clin ic | Medical Departme n ^t |
| 1 ⁰ | 1 ¹ | 1 ² | 1 ³ | 1 ⁴ | 1 ⁵ | 1 ⁶ | 1 ⁷ |

| | | | | | | |
|--|--|---|--|--|--|--|
| Survey was conducted for the Nursing Administration Office, Injection Room, CSSD, Laundry, Blood Transfusion (BT) Unit, IPC Division & PAC+Central Admission Unit (CAU). | Survey was done for the 3 core areas which includes two Isolation rooms, two Chemotherapy & General Oncology area. | Survey was done for 6 core areas including OPDs, Eye OT, Eye reception area & Eye ward, Diagnostic room, Eye Clinics/store. | Survey was conducted for the 2 core areas of the Department which include Orthopedic Clinics/OPDs & Orthopedic ward. | areas which includes Pediatric Clinics/OPDs, NICU, Neonate Ward (KMC+ Pharmacy), Pediatric Ward & PICU. 2nd bi-annual survey was done for 5 core | alone for the 1st bi-annually survey and for the 2nd bi-annual survey 3 core areas were Survey was conducted for IPD Pharmacy which are OPD Pharmacy, IPD Pharmacy & Form II Pharmacy. | the department which includes Occupational Therapy, Hand & Splinting Unit, Physiotherapy OPDs, Pediatric Physiotherapy & Women's Physiotherapy (at the Gynae. OPD). Survey was conducted for the 5 core areas of |
| 84.63% | 90.97% | 90.46% | 83.37% | 91.38% | 87.55% | 87.12% |
| 80.17% | 87.54% | 88.61% | 86.22% | 91.38% | 90.92% | 90.43% |
| 89.09% | 94.39% | 92.31% | 80.51% | - | 98.7% | 83.80% |

| | | | | | | |
|---------------------------------|----------------------------|---|------------------------------------|-----------------------------------|----------------------------------|---------------------------------------|
| Nursing Department [†] | Oncology Unit [†] | Ophthalmology Department (Eye Hospital) | Orthopedic Department [†] | Pediatric Department [†] | Pharmacy Department [†] | Physiotherapy Department [†] |
| 1 ⁸ | 1 ⁹ | 2 ⁰ | 2 ¹ | 2 ² | 2 ³ | 2 ⁴ |

Quality Assurance Division

| | | | | | |
|--|--|--|--|--|--|
| Disorder (SUD) Unit, Psychiatric Multipurpose hall, Clinics/OPD chambers, Occupational therapy Unit, Speech & language Unit, Psychiatric Reception. 2nd bi-annual survey was done since the department was scheduled to move to THE PEMA soon. 1st bi-annual survey was done for the all the units and rooms which includes linen room, Procedure room, Nurse Station, ECT room, both male & female wards, Substance Use | includes CT Unit, MRI Unit, X-ray Units, Ultrasound Units (including USG units of New Hospital Building, CHD & New MCH) Survey was done for 4 core units | Sur gical Dep art men t | of the Department which includes Surgical Survey was conducted for two core areas OPDs and Minor OT. | the Department which includes two Surgical wards in the New Hospital Building. Survey was conducted for two core | |
|--|--|--|--|--|--|

| | | | | |
|-------------------------------------|-----------------------------------|----------------|--|--|
| | which | | areas of | |
| 94.21% | 92.14% | | 88.53% | 84.38% |
| - | 89.02% | | 88.31% | 86.61% |
| 94.21% | 95.25% | | 88.75% | 82.14% |
| Psychiatric Department [†] | Radiology Department [†] | | Surgical OPD (Old Hospital Building) ^{a)} | Surgical Wards (New Hospital Building) ^{b)} |
| 2 ⁵ | 2 ⁶ | 2 ⁷ | | Overall Average |

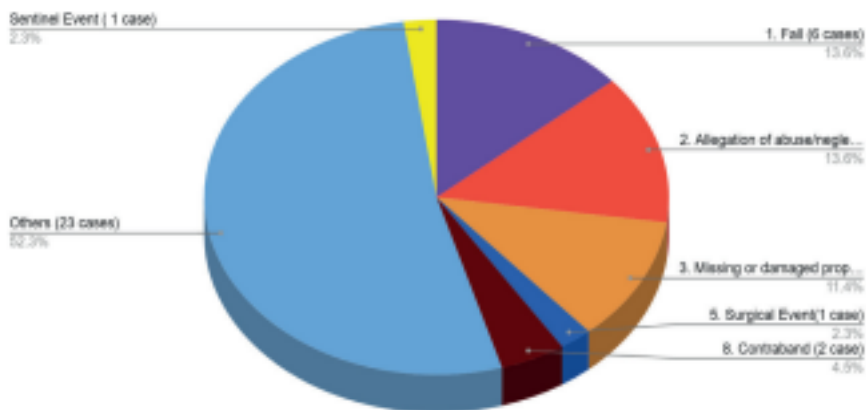
Quality Assurance Division

6. Incident summary

| SN | Types of Incidents | No. of Incidents |
|----|---|------------------|
| 1 | 1. Fall (bed, chair, uneven surface, wet surface, fall while ambulating | 6 |
| 2 | 2. Allegation of abuse/neglect (physical, sexual, verbal, threat, argument) | 6 |
| 3 | 3. Missing or damaged property | 5 |

| | | |
|----|--|----|
| 4 | 4. Exposure to blood or body fluid (needle stick, blood, saliva/spitting, urine/faeces, open wound) | 0 |
| 5 | 5. Surgical event (wrong body part, wrong procedure on wrong patient, retained instrument in patient discovered after surgery/procedure) | 1 |
| 6 | 6. Treatment complications (medication errors and adverse medication reaction) requiring significant medical intervention. | 0 |
| 7 | 7. Procedure error (lab tests, clerical, result reporting, safety) | 0 |
| 8 | 8. Contraband (weapon, illicit drugs) | 2 |
| 9 | 9. Fire or Environment Emergency | 0 |
| 10 | 10. Others (suicide death, suicide attempt, homicide) | 23 |
| 11 | 11. Sentinel Event | 1 |
| | Total Incidents Received | 44 |

No. of Incidents

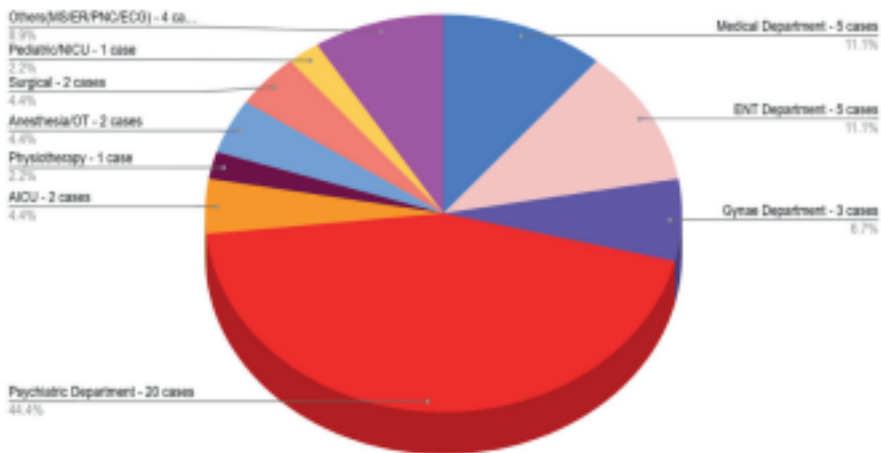


Quality Assurance Division

| Units/Departments | No. of Incidents |
|------------------------|------------------|
| Medical Department | 5 |
| ENT Department | 5 |
| Gynae Department | 3 |
| Psychiatric Department | 20 |

| | |
|-------------------------------|---|
| AICU | 2 |
| Physiotherapy | 1 |
| Anesthesia/OT | 2 |
| Surgical | 2 |
| Pediatric/NICU | 1 |
| Others (MS Office/ER/PNC/ECG) | 4 |

% of Incidents for 2025 according to Units/Departments

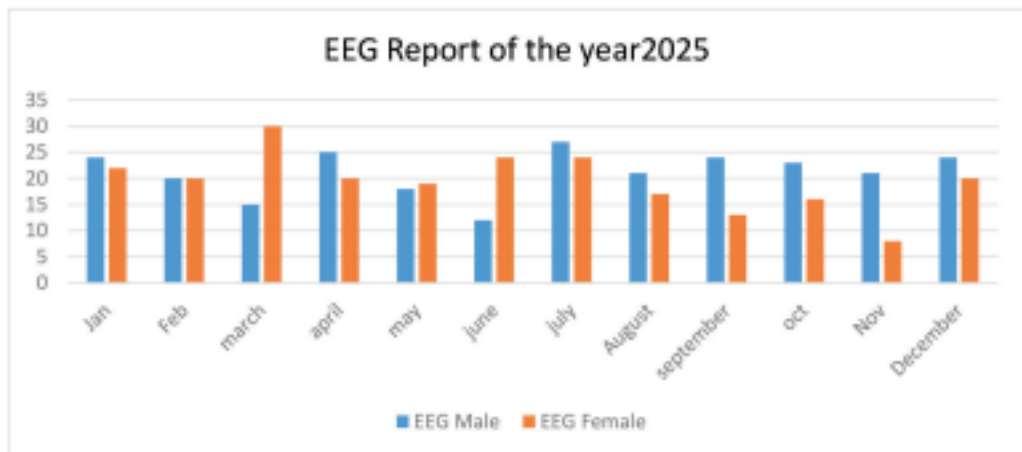


Centre for Research in Respiratory and Neuroscience (CRRN)

Centre for Research in Respiratory and Neuroscience

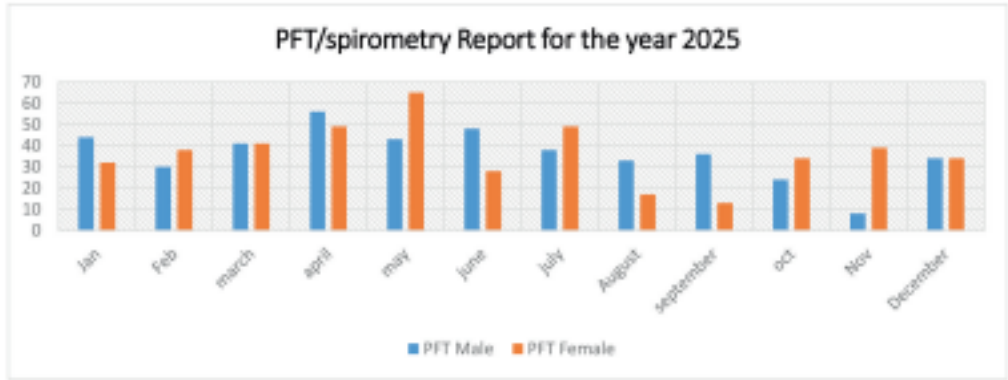
The Centre for Research in Respiratory and Neuroscience (CRRN) has been part of the Faculty of Postgraduate Medicine since 28 June 2016. It is the sole facility offering EEG, EMG, nerve conduction studies (NCS), and lung function tests or spirometry for patients. Currently, NCS and EMG services are temporarily suspended as the responsible doctor pursues further studies, but these services should resume by June 2026. Meanwhile, EEG and spirometry continue to be offered without interruption to patients referred from JDWNRH and all 20 Dzongkhags.

These are the annual report for the year 2025



| EEG Test Report | | Jan | Feb | | M | | July | Aug | Sep | Oct | Nov |
|-----------------|------|-----|-----|----|----|----|------|-----|-----|-----|-----|
| | Male | 24 | 20 | 15 | 25 | 18 | 12 | 27 | 21 | 24 | 23 |
| Female | 22 | 20 | 30 | 20 | 19 | 24 | 24 | 17 | 13 | 16 | 08 |

Annual Report of Spirometry



Centre for Research in Respiratory and Neuroscience

Annual Report of Spirometry

| EEG Test Report | | Jan | Feb | Mar | Apr | May | June | July | Aug | Sept | Oct | Nov | Dec |
|-----------------|------|-----|-----|-----|-----|-----|------|------|-----|------|-----|-----|-----|
| | Male | | 44 | 30 | 41 | 56 | 43 | 48 | 38 | 33 | 36 | 24 | 8 |
| Female | | 32 | 38 | 41 | 49 | 65 | 28 | 49 | 17 | 13 | 34 | 39 | 34 |

Heart Center

Heart Center

1. Introduction

The Heart Center at Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) has continued to make significant strides in advancing cardiovascular care in Bhutan. As the country's premier cardiac facility, the center provides a comprehensive range of services, including cardiac catheterization laboratory (Cath lab) procedures, a dedicated cardiac care unit (CCU), and non-invasive diagnostic services.

Since its establishment, the Heart Center has played a pivotal role in improving patient outcomes, reducing the need for referrals abroad, and strengthening Bhutan's capacity for managing cardiovascular diseases. The Cath lab, launched on September 7, 2024, has transformed the management of ischemic heart disease, enabling life-saving interventions such as percutaneous coronary interventions (PCI), pacemaker implantations, and conduction system pacing and cardiac resynchronizing therapy. The 4 bedded CCU continues to provide specialized care for critically ill cardiac patients, ensuring timely and advanced management of acute coronary syndromes, heart failure, and arrhythmias. Additionally, the non-invasive diagnostic services, including echocardiography, stress testing, and Holter monitoring, support early detection and risk stratification of cardiac conditions.

This Annual Health Report presents an overview of the Heart Center's performance over the past two years, highlighting key clinical activities, procedural volumes, patient outcomes, and quality improvement initiatives. The report also underscores the impact of the center's services on Bhutan's healthcare system and outlines future directions for advancing cardiac care.

Through continuous innovation, capacity building, and multidisciplinary collaboration, the Heart Center remains committed to delivering high-quality, evidence-based

cardiovascular care to the people of Bhutan.

2. Goals:

1. Reduce mortality related to cardiovascular disease.
2. Improve quality of life of patients with cardiovascular disease.
3. Set and provide services of highest standard.
4. Form and sustain highly trained, robust and dedicated team.
5. Keep pace with technological and medical advancement consistently.
6. Emergency response time 30 minutes.

Heart Center

3. Overview:

In September 2023, the Jigme Dorji Wangchuck National Referral Hospital (JDWNRH) in Thimphu inaugurated its first state-of-the-art Cardiac Catheterization Laboratory (Cath Lab) alongside a dedicated Heart Center. This milestone was made possible through the vision and unwavering support of His Majesty The Fourth Druk Gyalpo Jigme Singye Wangchuck, who was granted the Blue Planet Award, which played a pivotal role in the development of this project.

The Heart Center was launched with a passionate team consisting of an interventional cardiologist, six Cath lab-trained nurses and eleven trained CCU nurses, marking a new era in Bhutan's cardiac care. The facility has significantly enhanced cardiovascular services in the country, providing advanced diagnostic and interventional procedures for heart patients. Since

The establishment of the Cath Lab has significantly reduced the need for ex-country referrals, marking a major milestone in Bhutan's healthcare system. By shortening the time to treatment and reducing financial burdens, the facility has made a profound impact on the country's healthcare services. Despite being a relatively new service, the Heart Center continues to evolve dynamically, striving to provide comprehensive, high-quality, evidence-based cardiac care to the Bhutanese population. Moving forward, the center remains committed to advancing cardiovascular healthcare, fostering medical collaborations, and strengthening local expertise to meet the increasing burden of heart disease in Bhutan.

| Position | Number |
|-----------------------------|--------|
| Interventional Cardiologist | 1 |
| General Cardiologist | 1 |

| | |
|-------------------------|--|
| GDMO | 4 |
| Cath lab Nurses | Trained - 4 Undergoing training – 6 Untrained - 1 |
| CCU | Trained – 8 Undergoing training - 10 Untrained - 9 |
| Non-invasive Cardiology | Echo tech (adult- 6, Pead-3) ECG-1 |
| Receptionist | 1 |

Table 1: Human resource of Heart center.

Heart Center

4. Cardiac Catheterization Laboratory (Cath Lab)

In 2025, a total of 496 patients underwent interventional procedures at Cath Lab, Achieving success rate of about 98.7%. Among these cases 5 were diagnosed with Chronic Total Occlusion (CTO) and complex Triple Vessel Disease (TVD). Due to the absence of onsite Cardiovascular surgical support, some of these patients required referral to India for advance surgical intervention.

4.1 Total cases by gender distribution.

| Total Patient | Male | Female |
|---------------|------|--------|
| 496 | 311 | 185 |

Table2: Total case distribution by gender

4.2. While the Cath Lab has the potential to expand its scope, it currently provides the following essential diagnostic and interventional services:

1. Coronary angiography (CAG)
2. Percutaneous Coronary Intervention (PCI)
3. Pacemaker Implantation (PPM)
4. Peripheral Angiography (PAG)
5. Angiogram/Angioplasty
6. Structural heart disease services (ASD, PFO)

7. Right Heart Catheterization (RHC)

8. Renal Angiogram.

4.3. Number of procedures Performed.

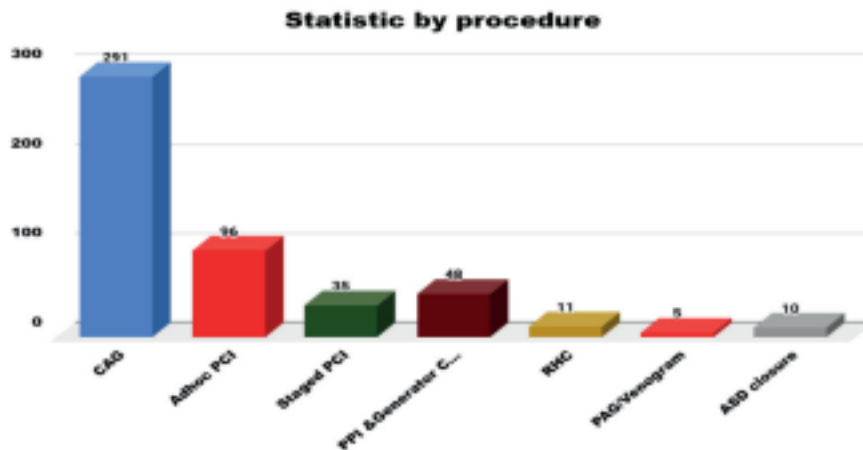


Figure 1: Number of procedures performed.

Heart Center

4.4. Nature of Cases.

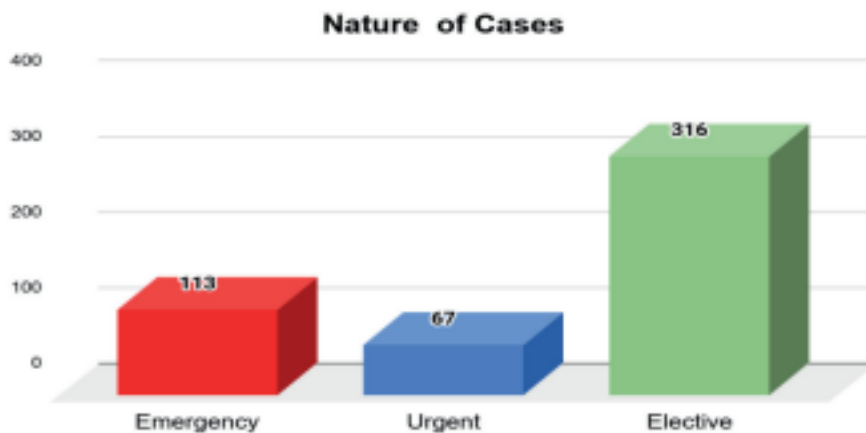


Figure 3: Distribution of cases.

4.5. Distribution of Cases.

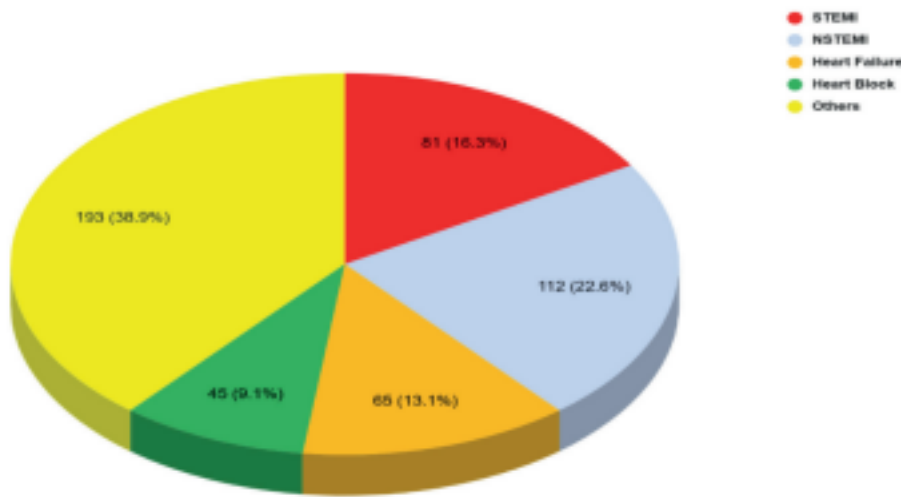


Figure 2: Nature of Cases.

Heart Center

4.6. Total no. of ACS and Non-ACS

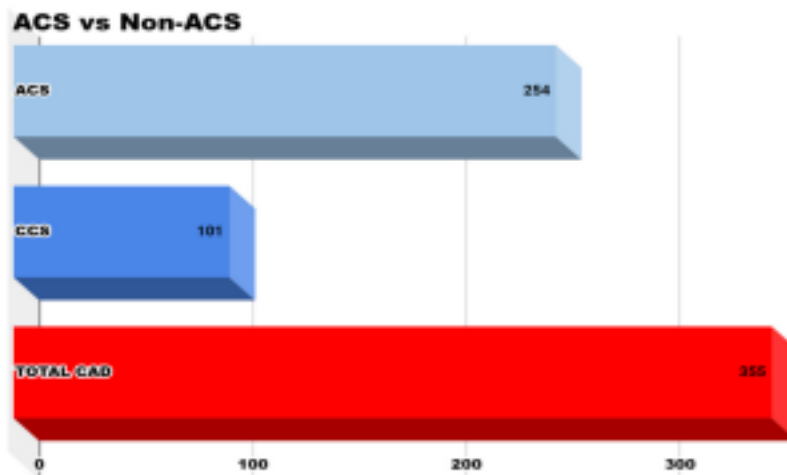


Figure 4: ACS vs non -ACS

4.7. Achievements:

4.7.1. Management of Chronic Total Occlusion (CTO) of coronary arteries. (Fig 5)
 International Workshop on Coronary Chronic Total Occlusion (CTO) Intervention was conducted from December 2–5, 2025, under the expert guidance of Dr. Satoru Sumitsuji, Guest Professor at Osaka University Graduate School of Medicine, Japan. The workshop

focused on advanced CTO-PCI techniques and imaging-guided interventions, including IVUS, through live case demonstrations and hands-on training. This initiative significantly enhanced local capacity in managing complex coronary artery disease and strengthened Bhutan's ability to deliver high-quality, advanced interventional cardiology services within the country.



Figure 5: CTO camp and proctorship

Heart Center

4.7.2. Congenital Heart Defect Intervention Program: Workshops and Milestones (2025) A series of workshops and CME activities in 2025 under the theme of Congenital Heart Defect Intervention, significantly advancing structural heart disease services in Bhutan. The program began with a Congenital Heart Defect Screening Skill Enhancement Workshop (January 10–11, 2025) led by Dr. Chandra Mani Adhikari from Shahid Gangalal National Heart Center, Nepal. This was followed by a Workshop and CME on Congenital Heart Defect (March 28, 2025), during which the first Atrial Septal Defect (ASD) device closure in Bhutan was successfully performed under the guidance of Dr. Kothandam Sivakumar from The Madras Medical Mission, Chennai. Subsequently, a Phase I Congenital Heart Defect Device Closure Program (May 9–11, 2025) was conducted again with Dr. Chandra Mani Adhikari as the invited proctor. A total of 11 ASD device closure and 1 PFO device procedures were successfully completed. These initiatives collectively mark a major milestone in establishing congenital cardiac intervention services in Bhutan.

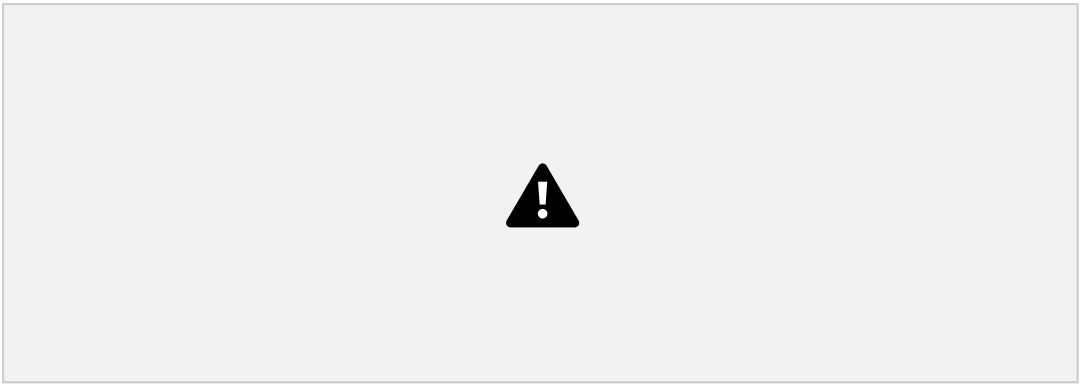
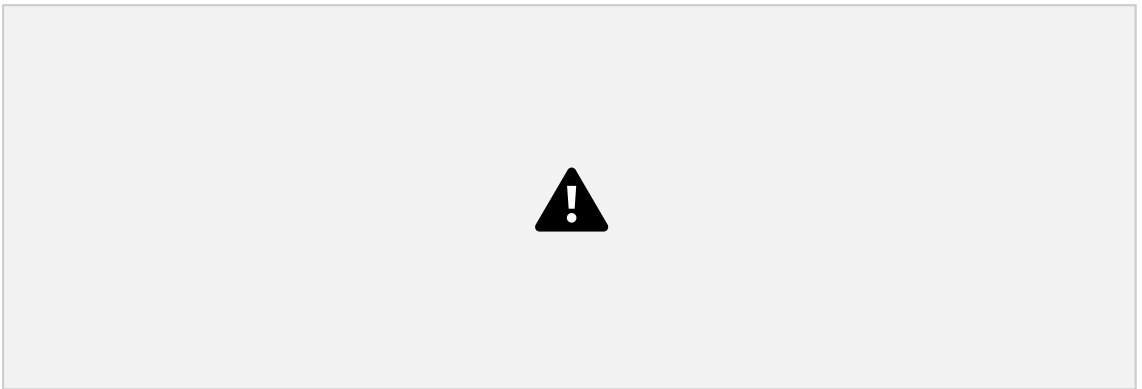


Figure 6: Congenital Heart Defect Intervention Program: Workshops and Milestones (2025)



Heart Center

4.7.3. Intra Vascular Ultrasonography (IVUS) Guided Percutaneous Coronary Intervention.

First Intravascular Ultrasound (IVUS)-guided Percutaneous Coronary Intervention (PCI) in Bhutan in a patient with complex unprotected left main and triple vessel coronary artery disease. The first IVUS-guided PCI in Bhutan was performed on February 9th 2025. The use of IVUS enabled precise lesion assessment and optimal stent deployment, significantly improving procedural safety and outcomes. This landmark achievement represents a major advancement in interventional cardiology and highlights the need for permanent IVUS services in Bhutan.

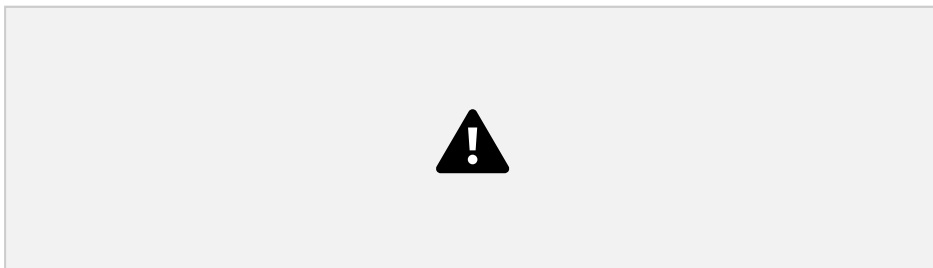


Figure 7: First IVUS guided PCI conducted on 9th February 2025

4.7.4. ACS Network Strengthening & RHD Echocardiography Workshop (2025)

A 3-day workshop on ACS Network Strengthening and Basic Echocardiography for Rheumatic Heart Disease (RHD) Detection was conducted from May 22–24, 2025 at Jigme Dorji Wangchuck National Referral Hospital, Thimphu, targeting General Duty

Medical Officers (GDMOs). Organized by the Heart Center in collaboration with Ministry of Health, Bhutan and Medical Education Centre for Research, Innovation and Training (MECRIT), the program focused on strengthening ACS referral networks and building capacity in basic echocardiography for early RHD detection through lectures, case-based discussions, and hands-on training. This initiative significantly enhanced district-level skills for early diagnosis and timely cardiovascular care.

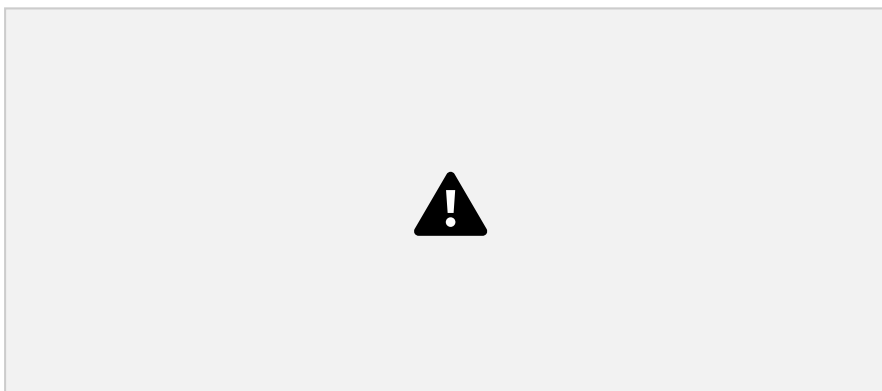


Figure 8 : ACS Network Strengthening & RHD Echocardiography Workshop (2025)

Heart Center

5. Annual Report of Cardiac Care Unit

5.1. The Overview.

The Cardiac Care Unit (CCU) has been operational since 2023 and has completed two years of service delivery. At present, the unit is staffed by 14(8 trained nurses and 6 untrained nurses). The CCU functions as a core critical care unit for patients requiring continuous cardiac monitoring, with a primary focus on the management of heart failure patients and acute myocardial infarction.

The unit delivers comprehensive care for a broad spectrum of acute and critical cardiac conditions, including:

- Management of Myocardial Infarction (MI) and Unstable Angina
- Continuous invasive and non-invasive hemodynamic monitoring, including arterial line and Swan-Ganz catheter monitoring
- Pre- and post-angiogram care, including overnight observation for post-Percutaneous Coronary Intervention (PCI) patients
- Management of patients requiring Intra-Aortic Balloon Pump (IABP) support
- Care of patients undergoing thrombolytic therapy
- Monitoring and management of acute aortic emergencies
- Post-pacemaker implantation monitoring and care
- Care of post-cardiac arrest patients, including those requiring mechanical

ventilation Patient Admission and Statistics. January 2025 – December 2025

A total of 296 patients were admitted to the Cardiac Care Unit during this period, with

cases including:

81 STEMI cases (ST-Elevation Myocardial Infarction)

55 NSTEMI cases (Non-ST-Elevation Myocardial Infarction)

55 Heart Failure cases

Heart Center

5.2 Procedures Done in CCU.



Figure 9. Central Line

insertion.

Figure 10. Perclose ProGlide sutured-mediated closure device used for femoral artery access site hemostasis following catheterization procedure , enabling rapid closure and early ambulation.

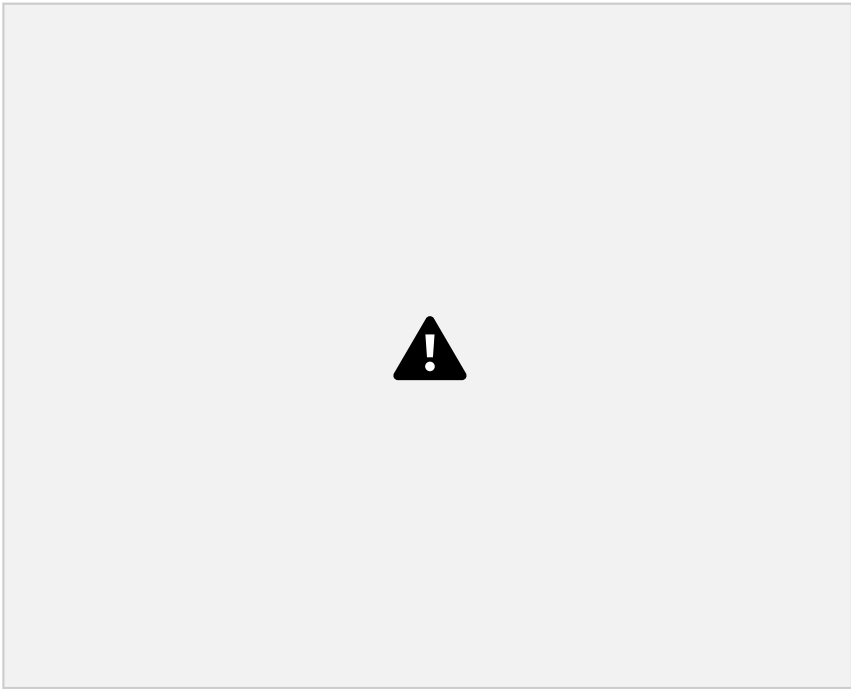


Figure 10: Perclose ProGlide suture-mediated closure device used for femoral artery access site hemostasis following catheterization procedure enabling rapid closure and early ambulation

Heart Center

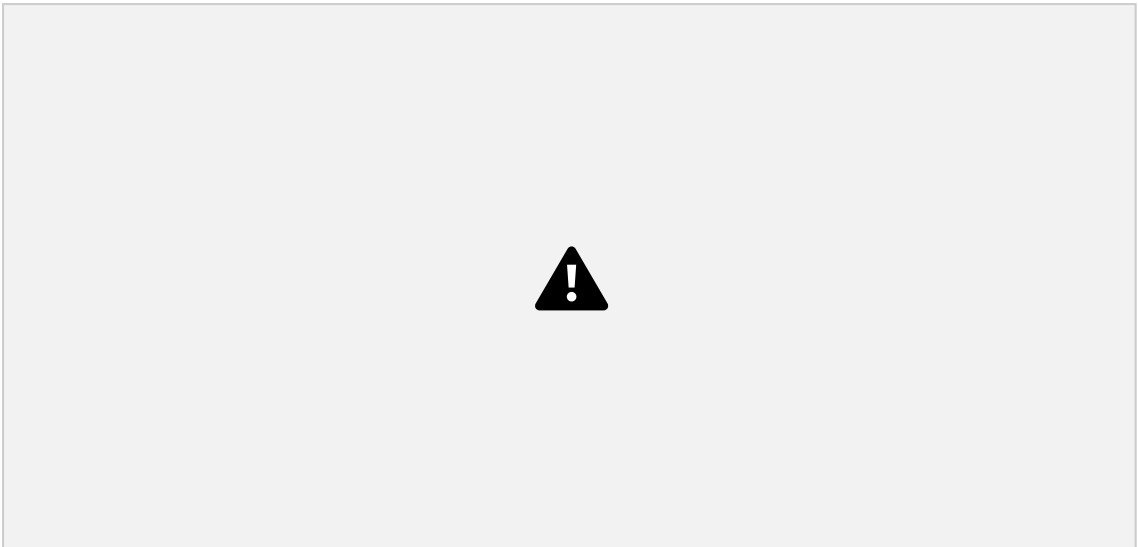


Figure 11: Temporary Pacemaker insertion.

5.2.1. Advance Nursing Care in CCU

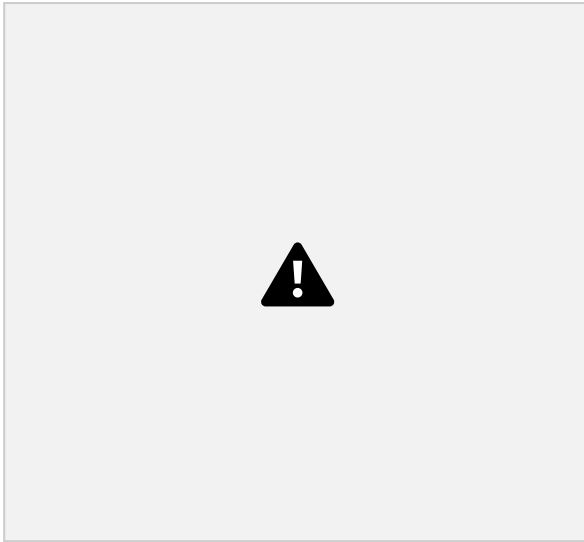
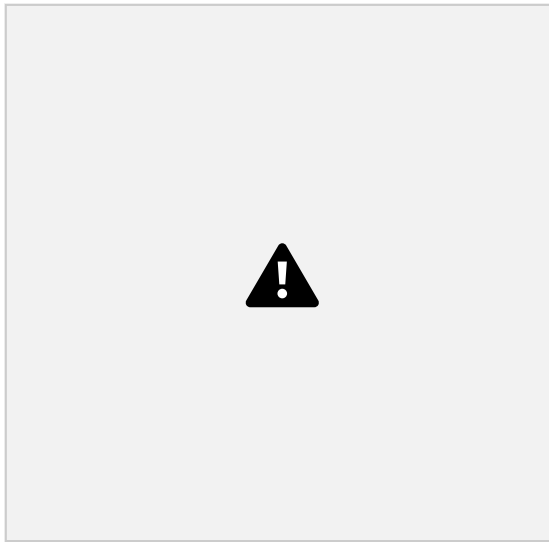


Figure 12: Care of patient with IABP.

Heart Center

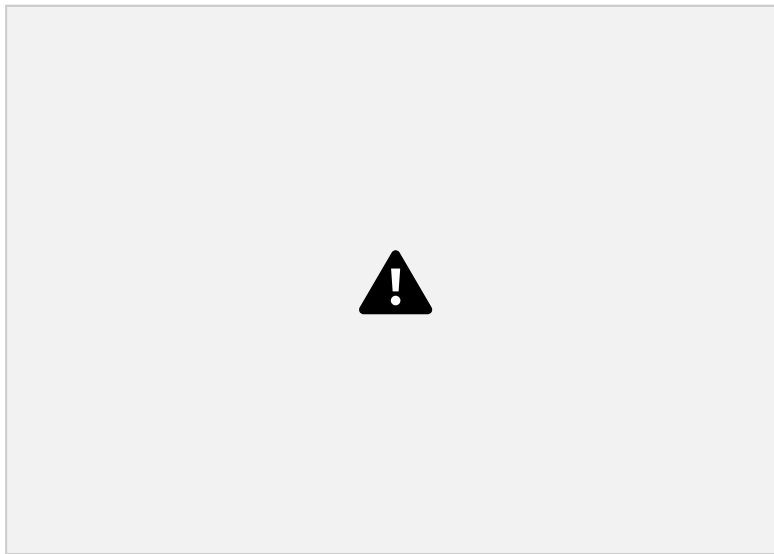


Figure13: Removal of Femoral Sheath.

5.2.2. Other Nursing Care

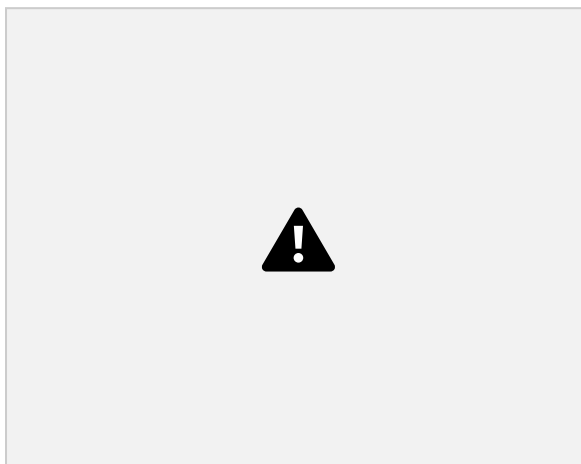
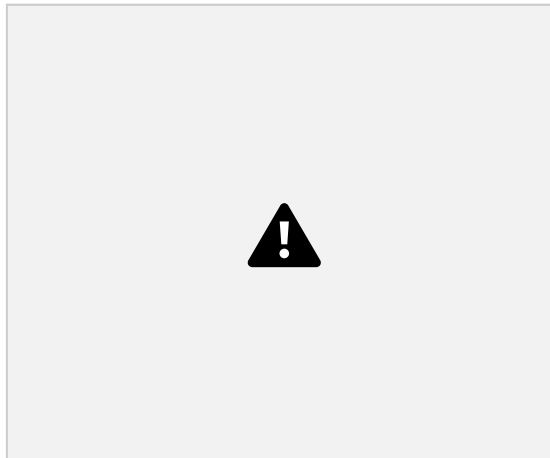


Figure14: Lung Physiotherapy *Figure15: Personal*

Hygiene.

6. Non-invasive diagnostic cardiology unit

(Echocardiography, Holter, Exercise stress test and Electrocardiography) The Non-invasive diagnostic cardiology unit under Heart Center is a comprehensive facility dedicated to the diagnosis, treatment, and management of cardiovascular diseases. It

offers a range of non-invasive diagnostic services, including echocardiography, holter monitoring, exercise stress tests, and electrocardiography (ECG), aimed at providing high quality care for patients with heart conditions. The center is staffed by 2 cardiologists, 6 echocardiography sonographers and 2 ECG nurses committed to delivering personalized and evidence-based diagnosis and management.

Heart Center

6.1 Patient Visits and Statistics

In 2025, 16432 patients visited the adult echocardiography unit to avail various cardiac related services. Female patients constituted the majority of services seekers with total numbers of 9046 (55.05%), whereas male patients with total number of 7386 (44.95%), The following table shows the total number of procedures performed (2025). In 2025, TTE constituted the largest proportion procedures, with 8652 cases. ECG was the second most frequently performed procedure with 7463 cases followed by Holter monitoring 272 case. TEE and TME were performed 52 and 22 cases respectively.

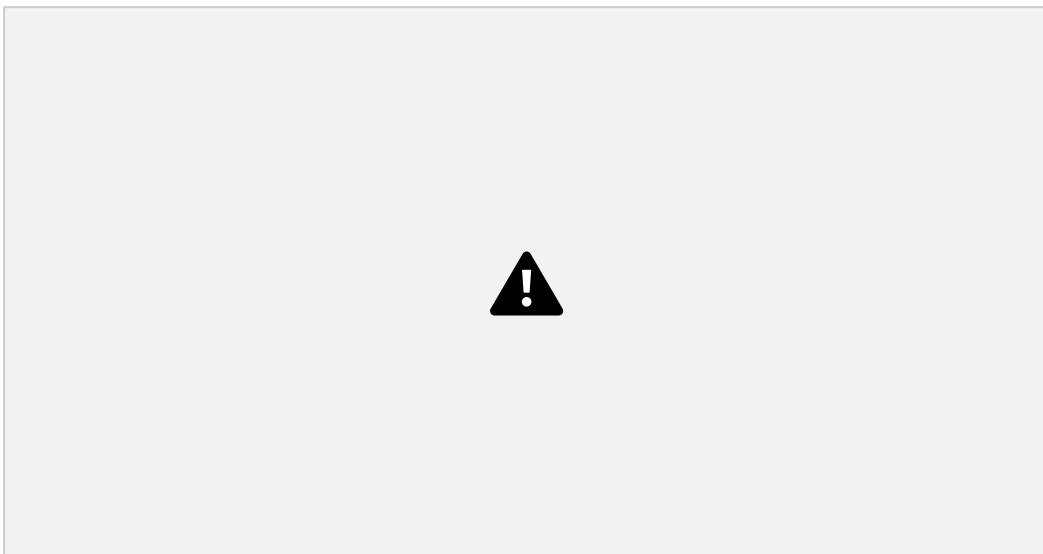


Figure 16: Total

number of Non-invasive procedures performed.

6.2 Transthoracic echocardiography (TTE) performed.

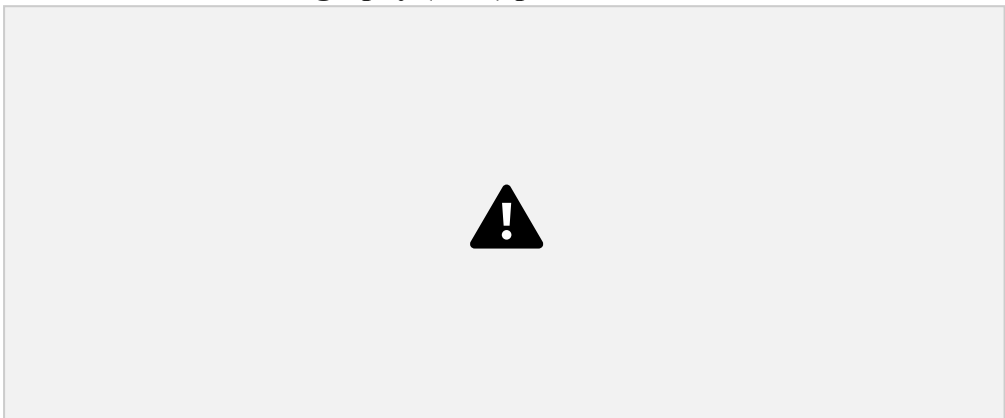


Figure 17: TTE Performed in 2025.

Heart Center

6.3 Electrocardiograph (ECG)



Figure 18: Total ECG performed.

6.4 Holter Monitoring.

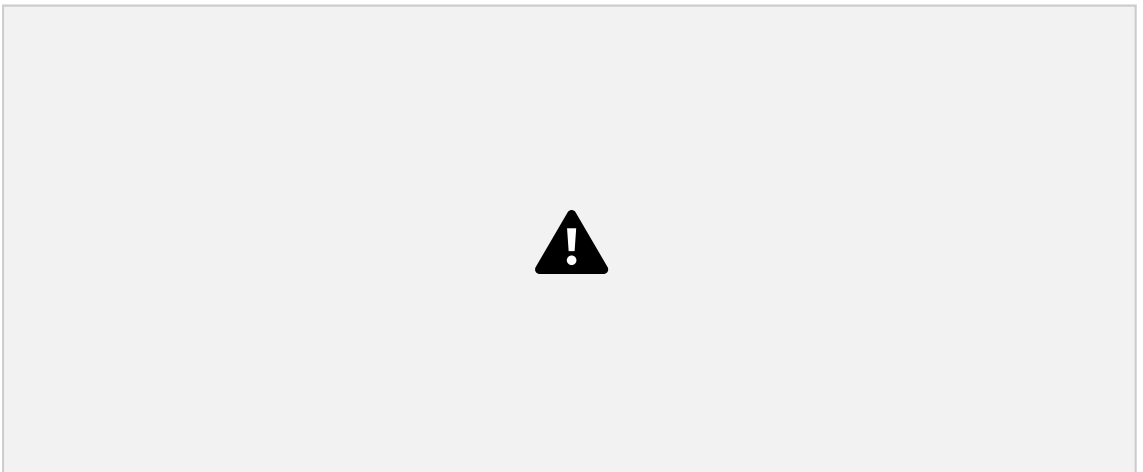


Figure 19: Total Holter monitoring performed.

6.5 Procedure by gender distribution.

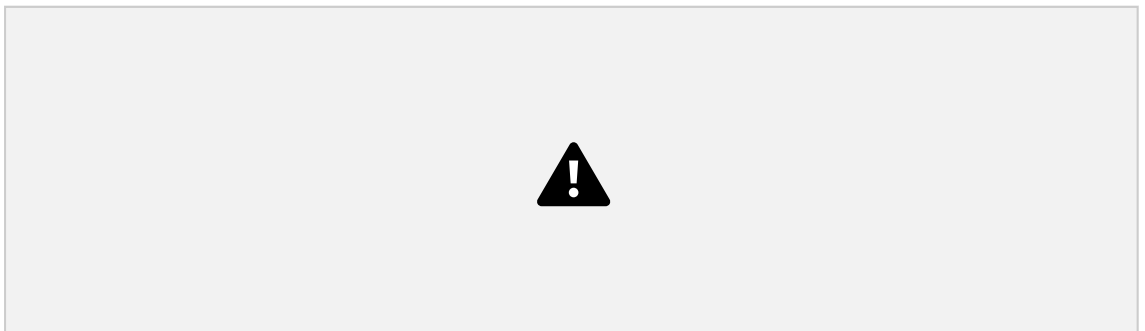


Figure 20: Procedure by gender distribution

6.6 Patient's statistic comparison between year 2024 and 2025

The data shows an overall increase in cardiac diagnostic procedures from 2024 to 2025, with notable growth in ECHO, ECG, TEE, and Holter monitoring. The largest percentage increase was seen in TEE (188.9%). Overall, the trend indicates rising demand for cardiac diagnostics and a shift towards more advanced and continuous monitoring methods.

| Procedure | 2024 | 2025 | Difference | Percentages |
|-----------|------|------|------------|-------------|
| ECHO | 7029 | 8652 | ↑1623 | ↑23.1% |
| TEE | 18 | 52 | ↑34 | ↑188.9% |
| TMT | 19 | 22 | ↑3 | ↑15.8% |
| HOLTER | 124 | 272 | ↑148 | ↑119.4% |
| ECG | 6148 | 7463 | ↑1315 | ↑21.4% |

Table 3: Patient statistics comparison 2024 & 2025

6.7 The following graphs show the echo cases performed as routine, semi-urgent, and emergent).

During the one-year period, a total of 8652 cases of echo were performed. Of these, the majority were routine cases (4892) accounting for the largest proportion of the services followed by emergent cases numbered 2544, and semi-urgent 1216 cases.

6.8 Achievements achieved by the echo unit for the year 2025.

“The year 2025 has been recorded a period of growth and progress for our echo unit, marked by significant achievements in strengthening cardiac care services despite high attrition. “Following are some of the key achievements.

1. Successfully trained three new staff as adult cardiac sonographer, which enhanced professional capacity.
2. Two new staff members were trained as paediatric cardiac sonographer Paving the way for specialized paediatric echocardiography services in JDWNRH.
3. Establishment of a dedicated paediatric echo unit with well-trained sonographer making a major step towards specialized a comprehensive paediatric cardiac care services in our country.
4. Significant reducing in patients waiting time and
5. Training of new echo technicians
 6. Decreased workload on existing staff through skill sharing and redistribution of responsibilities, which helped in promoting staff well-being and service efficiency.

Heart Center



Figure 21: new staff joining their duty after training.

6.9 Innovations and Technological advancement

1. Installation of one new advance 4D feature echo machine in adult echo unit to enhance quality imaging and to improve service delivery to patients.

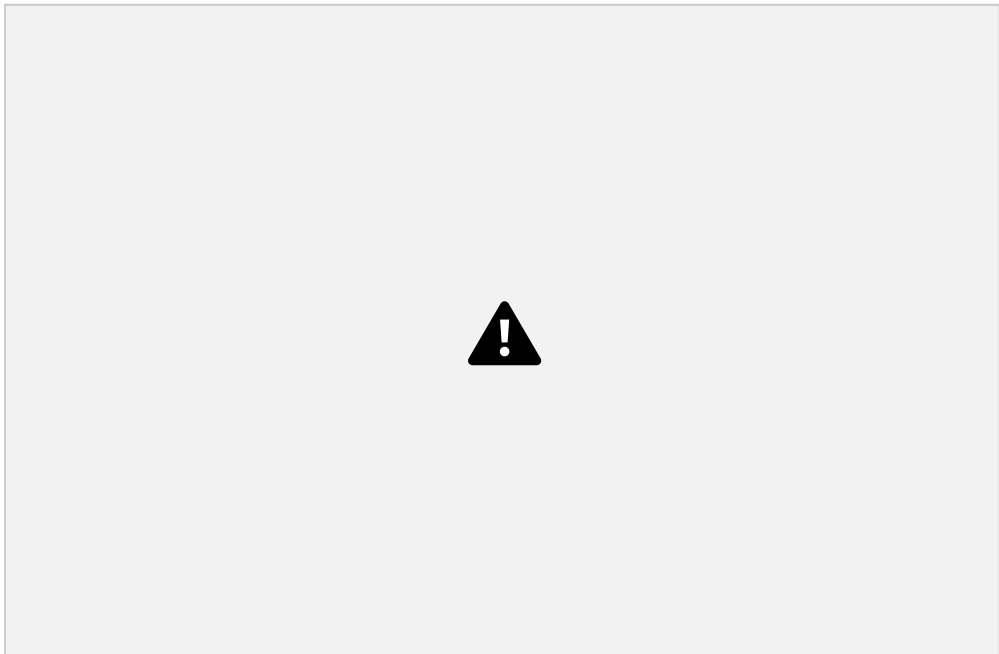


Figure 22: Training on 4D echocardiography

2. Global Longitudinal Strain (GLS) assessment was implemented for all patients with regional wall motion abnormalities (RWMA) and those with suspected cardiac amyloidosis, facilitating accurate evaluation of left ventricular function.



Figure 24: Global Longitudinal Strain (GLS): Speckle-tracking echocardiographic measure of myocardial deformation that assesses longitudinal left ventricular function, allowing early detection of subclinical systolic dysfunction.

3. Adopted echo-friendly practices by reducing paper base reporting through proper utilization of Epis.

6.10 The descriptive data analysis as a part of internal audit in pediatric echo unit.

In Pediatric echocardiographic unit the descriptive data analysis is done from April to December 2025 to determine the percentage of congenital heart disease among the patients screening for first time and to describe the pattern of congenital heart diseases. The total number of patients scanned for echocardiography for the first time was 733 and 535 patients have been detected to have one or multiple congenital heart defects. The rate of congenital heart disease was 73%.

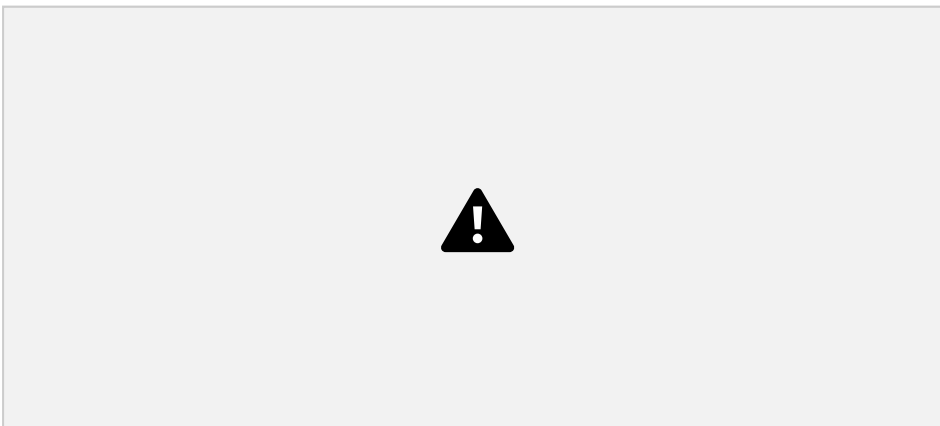


Figure 25: Normal and abnormal Echo Findings in Paediatric patients.

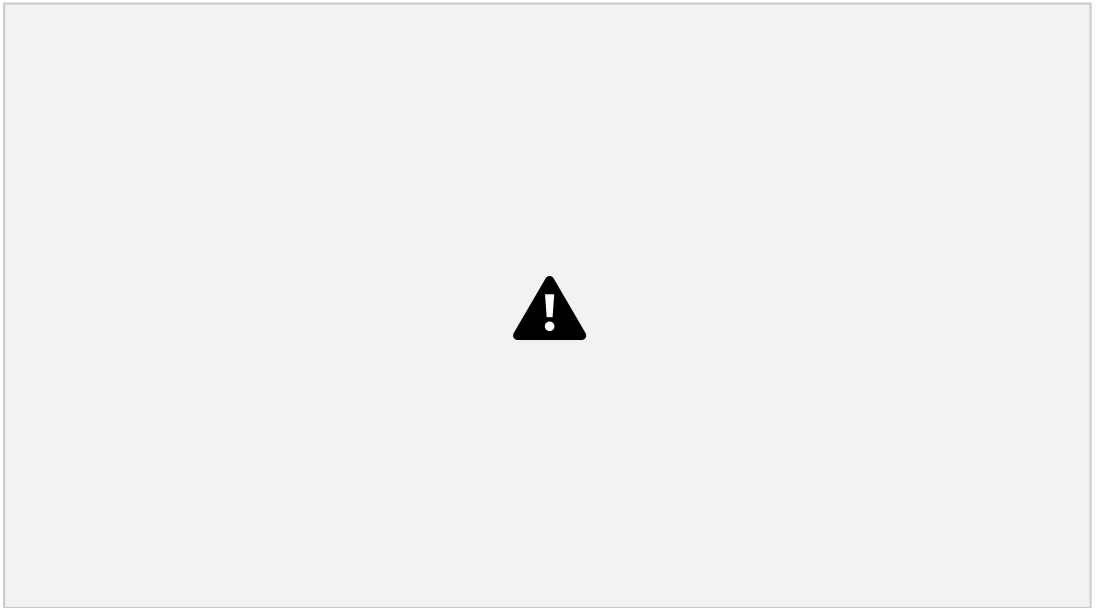


Figure 26: Average of abnormal Echo Findings in Paediatric patients.

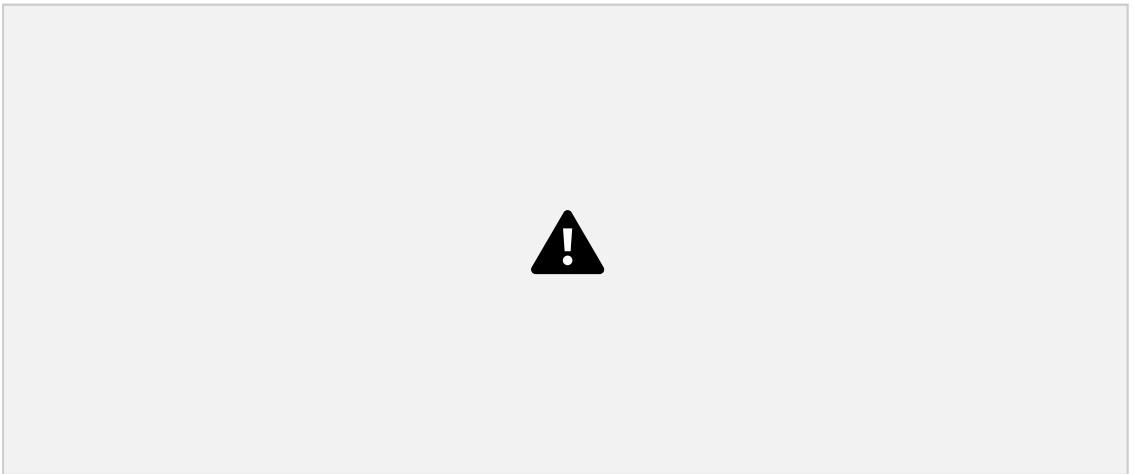


Figure 27: Average of Congenital Heart Disease in Paediatric patients.

7. Outpatient clinic services at Heart Center

The Heart Center at Jigme Dorji Wangchuck National Referral Hospital provides comprehensive outpatient services through specialized clinics, including a General Cardiology Clinic, PCI and Heart Failure Clinic, and Anticoagulation Clinic. These clinics ensure systematic follow-up, optimization of medical therapy, monitoring of treatment outcomes, and long-term risk factor management, thereby improving continuity and quality of cardiovascular care.

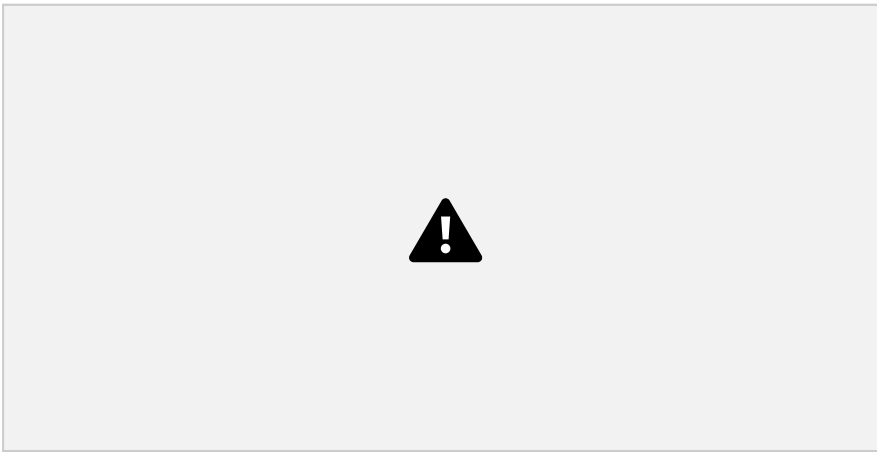


Figure 28: Intervetnional Cardiology OPD service

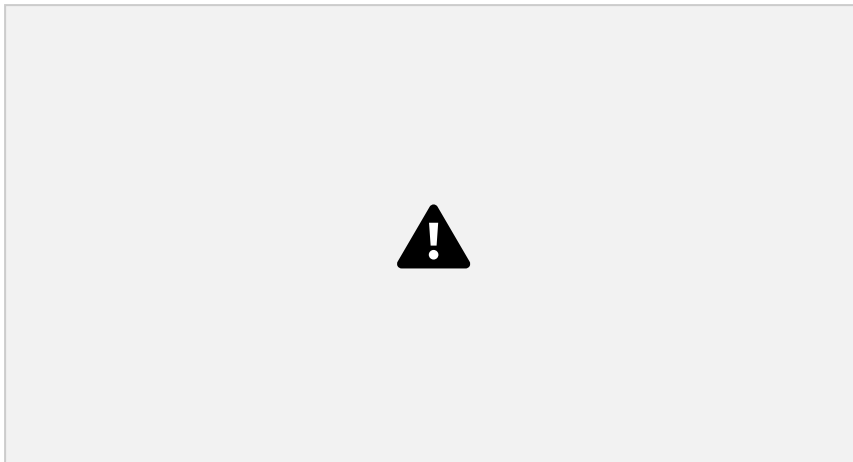


Figure 29: PCI Clinic and Anticoagulation Clinic service

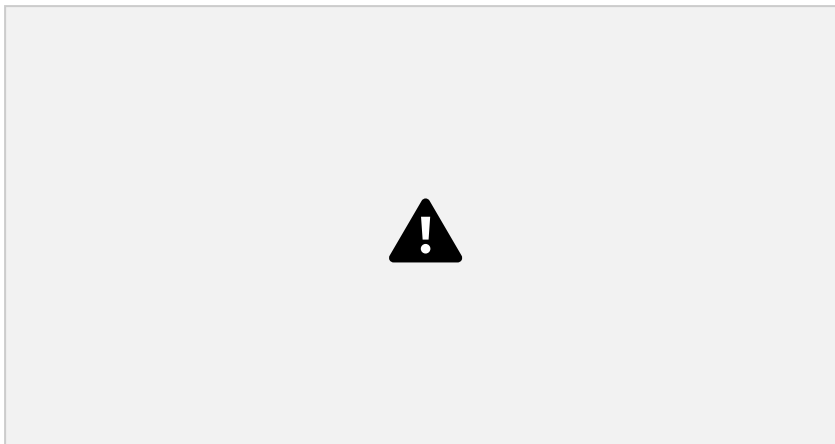


Figure 30. General Cardiology Clinic Service

Heart Center

8. Challenges

- Limited infrastructure and CCU bed capacity
- Shortage of specialized manpower (cardiologists, cath lab nurses, technicians)

- Limited availability of advanced technologies (e.g., IVUS, OCT) •
- Dependence on overseas referral for complex cardiac surgical cases • Delayed diagnosis and referral from peripheral centers
- Limited public awareness of cardiovascular diseases
- Financial and logistical constraints

9. Responses

- Addition of CCU beds and identification of a new cardiovascular unit •
- Initiation of in-country training programs and international workshops •
- Sending one cardiologist to Malaysia for advanced training
- Additional Cath Lab nurses and CCU nurses sent for specialized training •
- Use of advanced technologies during selected procedures and proctorships •
- Expansion of interventional services to manage more cases locally •
- Nationwide ACS network training and RHD screening programs •
- Community engagement and capacity-building initiatives
- Collaboration with government and partners for resource mobilization

10. Way Forward

- Operationalize and expand the new cardiovascular unit
- Develop structured training and fellowship programs with retention strategies
- Procure permanent advanced imaging and interventional equipment •
- Establish a national cardiac surgery program
- Strengthen referral networks and telemedicine support systems • Scale up public awareness and preventive cardiology programs • Ensure sustainable funding and long-term strategic planning for cardiac services • Continuing Education & Training Initiatives:

Heart Center

- o Training and upskilling existing staff through international fellowships and collaborations
- o Recruiting additional personnel to support Cath Lab operations
 - o Structured training programs for cardiologists, CCU doctors, medical residents, nurses, and technicians in advanced techniques and interventional procedures

• Expected Impact:

Improved workforce competency, standardized clinical care, and enhanced national capacity to deliver high-quality, advanced cardiac interventions.

**Department of
Anesthesiology & Pain
Medicine**

Department of Anesthesiology & Pain Medicine

Introduction

It is with great pride that I present the 2025 Annual Report for the Department of Anesthesiology & Pain Medicine. This past year has been marked by remarkable resilience, innovation, and achievement. As I reflect on the pages that follow, I am continually inspired by the unwavering commitment of our faculty, staff, and trainees to our tripartite mission of clinical excellence, education, and discovery.

This year presented both challenges and opportunities. We witnessed the expansion of surgical services for the Mother and Child Hospital, alongside significant growth in our Pain Medicine division. None of this would have been possible without the collective effort and collaborative spirit that define our department. Our success is a testament to our shared dedication to putting patients first while supporting one another as a team.

We are particularly proud of the recognition earned by our dedicated anesthesia team, who continually aspire to be the best in the country. To our entire team—thank you for your passion and perseverance. I invite you to join me in celebrating the outstanding accomplishments that define our department.

Dr. Jampel Tshering
MD Anesthesiology & Chronic Pain Fellow
Head, Department of Anesthesiology & Pain Medicine

Executive Summary

Year in Review

- ❖ **Clinical Volume:** Over 10,529 anesthetics administered for surgeries at operating theater in the year 2025.
- ❖ **Team Growth:** Welcomed two new residents to our department, who will train with us over the next four years to acquire critical knowledge and skills.
- ❖ **Key Achievement:** Successfully established anesthetic services at the Mother and

Child Hospital despite human resource challenges. Unlike the previous year, when chronic pain services were available only on Fridays, this year marked the expansion of these services to be accessible throughout the week. This achievement would not have been possible without the dedication and sacrifices of several team members.

- ❖ **Quality Improvement:** In the management of acute postoperative pain, we increased the number of cases receiving ultrasound-guided regional blocks, significantly improving the quality of pain care at JDWNRH. Ultrasound machines are now available in all operating rooms, enabling anesthesia providers to perform regional blocks for patients in need.

Department of Anesthesiology & Pain Medicine

Our People: Faculty, Staff, and Trainees

The Department of Anesthesiology and Pain Medicine is supported by a strong and dynamic team, ever ready to answer the nation's call. While the number of consultants continues to grow year by year, nurse anesthetists remain the largest group within the department and continue to serve as the backbone of the country's anesthesia services. Currently, there are 18 anesthesiologists nationwide, alongside a dedicated team of operating theatre technicians. Each year, we train residents and O.T. technicians at JDWNRH. This year, we welcomed new members and said farewell to retiring colleagues who have left an indelible mark on our institution. New Faculty we were delighted to welcome a new consultant who transferred from a regional referral hospital, joining our larger team to help navigate the complexities of expanding services.

Clinical Roles

Our clinical enterprise spans the perioperative spectrum, from preoperative assessment to postoperative recovery and chronic pain management.

The Pre-Anesthesia Clinic plays a vital role in preparing patients for surgery. Although this service is not widely understood by many, it is essential to surgical success. Except in emergency cases, every elective case is required to undergo this step prior to surgery. This process enables our department to stratify patient risk and optimize physiological status, ensuring that patients enter the operating room in the best possible physical and psychological condition.

The preoperative period is followed by the intraoperative period, the most critical phase of anesthesia services. Here, the anesthesia team bears the significant responsibility of safely inducing unconsciousness while maintaining patient stability. The stress involved is considerable, requiring meticulous execution of the anesthetic plan, as even a minor misstep can lead to catastrophic outcomes. It is both a profound responsibility and a privilege to fulfill this clinical role within the hospital.

Postoperative services are equally important, contributing to a smooth recovery. This phase ensures safe emergence from anesthesia, adequate acute pain management, and minimization of anesthetic side effects.

Pain Medicine

This year, our Pain Clinic recorded 1,986 patient visits exclusively for chronic pain

services, encompassing both outpatients and inpatients. We expanded access to interdisciplinary care by integrating psychology and physiotherapy to address the multifaceted nature of chronic pain. New interventional procedures, including transforaminal epidural steroid injections and celiac plexus nerve blocks, were introduced for chronic pain patients. These services have helped alleviate suffering for patients who might otherwise endure debilitating pain. Previously open only on Fridays, the service is now accessible throughout the week, significantly improving availability.

Department of Anesthesiology & Pain Medicine

Regional Anesthesia and Acute Pain

The Regional Anesthesia service performed hundreds of regional nerve blocks this year, with a notable increase in both safety and success rates. In collaboration with AIMS, India, and the Faculty of Postgraduate Medicine, KGUMSB, we successfully conducted a workshop with international experts. Over time, the department has grown to include a sufficient number of consultants competent in performing ultrasound-guided nerve blocks.

Education and Training

The department is actively involved in teaching residents, nurse anesthetists, and operating theatre technicians. Each year, we admit one or two residents into the MD Anesthesiology program; in 2025, we welcomed two new residents. Similarly, the department contributes annually to the training of O.T. technicians. We take pride in ensuring our team members remain knowledgeable and skilled, on par with international standards. Despite limitations, the department strives to keep pace with evolving technologies and techniques in the field of anesthesiology.

Residency Program

We worked diligently to ensure that our residents continue to excel, with several presenting at national conferences and publishing peer-reviewed research. Residents are provided with clinical exposure both within the country and abroad.

Fellowship Programs

Although the department currently lacks sufficient human resources to train fellows domestically, we are working in consultation with the Ministry of Health to send consultants for fellowship training in various subspecialty areas. To date, seven consultants have successfully completed fellowship programs and have returned to serve the nation with utmost dedication. To further strengthen departmental capacity, we continue to plan and support staff participation in workshops, trainings, and observer-ships.

Subspecialty areas include:

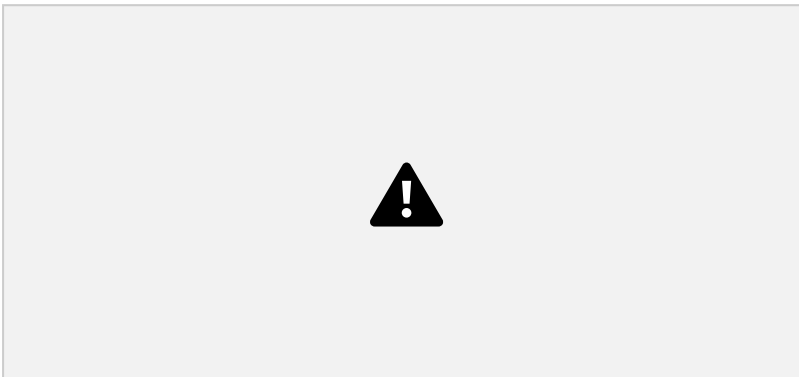
1. Chronic Pain Fellowship
2. Pediatric Anesthesia Fellowship
3. Regional Anesthesia and Acute Pain Medicine Fellowship
4. Neuro-anesthesia Fellowship
5. Critical Care Medicine Fellowship

Continuing Professional Development

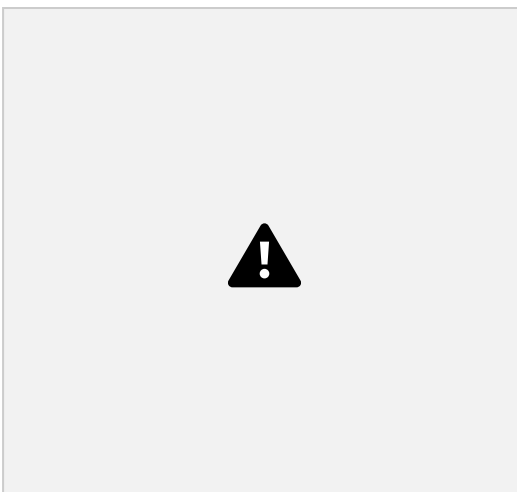
This year was marked by collaborations and the successful organization of international and national conferences, bringing together clinicians from across the region for hands-on workshops and didactic sessions on advances in anesthesia and point-of-care ultrasound. Key continuing professional development activities conducted in 2025 included:

Department of Anesthesiology & Pain Medicine

1. Scientific Workshop on Ultrasound-Guided Nerve Block and Intravenous Access Organized by the National Medical Society (NMS), Bhutan, in collaboration with AIIMS, India. This workshop was the first of its kind on ultrasound-guided nerve blocks to be conducted in Bhutan. It enabled many of our consultants and nurse anesthetists to gain a deeper understanding of the importance of regional nerve blocks. In addition to PowerPoint presentations on recent advances in regional anesthesia, participants learned about new developments in peripheral nerve blocks. The workshop combined theoretical sessions with hands-on skills training, including live demonstrations using chicken thighs and eggs. All participants found the workshop to be a valuable and practical learning experience.



1. Perioperative Pediatric Life Support Workshop





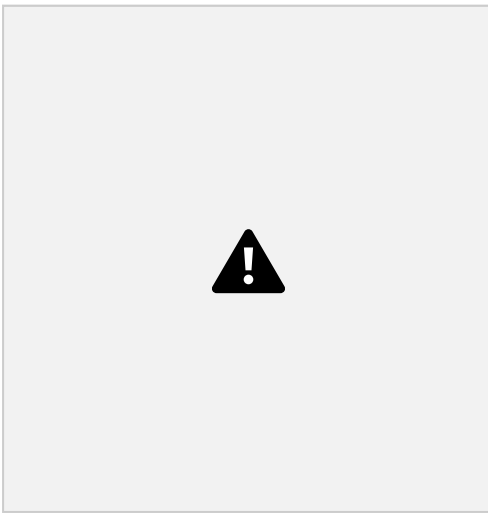
Department of Anesthesiology & Pain Medicine

2. Scientific Workshop on Pediatric Anesthesia

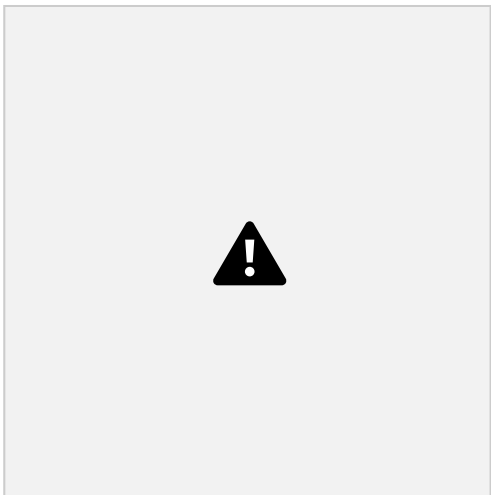
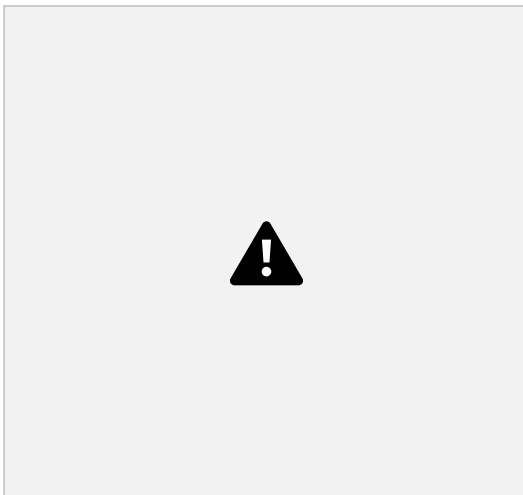
Organized at JDWNRH in collaboration with the Asian Society of Pediatric Anesthesiologists (Singapore). This two-day program was attended by 15 consultants. The training covered nearly all critical topics related to the perioperative care of pediatric patients—before, during, and after surgery. To support the continuation of similar training by local faculty, a half-day instructor course was incorporated, during which a select group of consultants were trained to conduct such workshops independently in Bhutan. This component was particularly valuable given the complexities and challenges associated with bringing in external expertise for specialized training in Bhutan.

23rd BARTC Refresher Course

A team from the Bangkok Anesthesia Regional Training Center (BARTC), based at Siriraj Hospital, Faculty of Medicine, Mahidol University, Bangkok, Thailand, visited our department to conduct a refresher course in Bhutan. Approximately 11 consultants specializing in various subspecialties presented on recent advances in anesthesia practice, helping to update our knowledge and skills. One full day was dedicated to lectures, while the remaining three days focused on practical demonstrations within the operating theater. In the operating rooms, we also set up nerve block stations, allowing the visiting team to demonstrate and teach techniques on actual patients requiring nerve blocks. This activity marked the department's largest collaboration to date in the exchange of scientific knowledge and skills with an external institution.



Department of Anesthesiology & Pain Medicine





Guest Lecture by Dr. Paul White

Emeritus Professor Dr. Paul White, author of numerous standard anesthesia textbooks, contacted our department and volunteered to present on two topics of interest. He delivered a lecture on a rapidly evolving area in anesthesiology: “Moving Beyond Opioid Analgesia: The Expanding Role of Non-Opioid and Complementary Medicine Practices in Managing Acute and Chronic Pain.” At our request, he also kindly participated in a thesis discussion with first-year residents, offering his general insights on research methodology. We extend our heartfelt gratitude to Dr. White for visiting Bhutan and generously sharing his experience and wisdom with us.

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Visit by U.S. Anesthesia Team

A U.S. team led by Dr. Keira Park Mason, Associate Professor of Anesthesia at Harvard Medical School and Boston Children’s Hospital, visited our department to share their experience in managing cases within the operating room. The visit was eye-opening for Bhutanese participants, highlighting the many advances in anesthesiology that we were not yet aware of. This activity served as an important reminder for our department to continue collaborating with institutions and hospitals to conduct such programs,

ensuring that our team remains updated and well-informed.

Annual Continuing Medical Education Program

This initiative aims to promote continuous professional development by providing opportunities to learn the latest evidence-based approaches in anesthesia and perioperative medicine. Through ongoing education, hands-on training, and exposure to updated clinical guidelines, all members of the anesthesia and perioperative care team will be better equipped to:

1. Deliver safe, effective, and high-quality anesthesia services
2. Apply the most current evidence-based strategies in patient assessment, monitoring, and management
3. Improve teamwork, communication, and decision-making in the perioperative environment
4. Reduce complications through adherence to updated safety protocols and international standards
5. Enhance patient outcomes and satisfaction throughout the perioperative journey

Forward

Department of Anesthesiology & Pain Medicine

Acknowledgments and Looking

As we close the chapter on 2025, we extend our deepest gratitude to our entire team—faculty anesthesiologists, residents, fellows, nurse anesthetists, technicians, and administrative staff. Your dedication to excellence and patient safety is the foundation of everything we do.

Looking ahead to 2026, we are focused on:

1. Expanding Chronic Pain Services: To meet growing patient demand.
2. Supporting Fellowship Training in Cardiothoracic Anesthesia: To address workforce needs.
3. Increasing Involvement in Research Proposal Development and Writing: To further refine our quality improvement and research efforts.

Together, we will continue to lead with compassion and innovation.

**Department of Community
Health**

