



GOVERNMENT MEDICAL COLLEGE Thiruvananthapuram

Health and Family Welfare Department
Government of Kerala

KERALA.HEALTH

GOVERNMENT MEDICAL COLLEGE Thiruvananthapuram

January 2026



Government Medical College Thiruvananthapuram

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GOVERNMENT MEDICAL COLLEGE
Thiruvananthapuram
Comprehensive Institutional Documentation

Health and Family Welfare Department
Government of Kerala

KERALA.HEALTH



Message



GOVERNMENT OF KERALA

Pinarayi Vijayan

CHIEF MINISTER

No.109/Press/CMD/26

24 January, 2026.

MESSAGE

Kerala's public health system has long been recognised for its commitment to quality, equity, and people-centred care and support. Medical College Hospitals play a key role, functioning not only as apex institutions for tertiary care but also as centres of excellence for medical education, research, and innovation.

The Government is developing Kerala as a 'Knowledge Economy' by laying a strong edifice of various institutions including Medical Colleges. The Medical College Hospital document showcases this commitment through its comprehensive clinical services, specialised departments, and advanced diagnostic and therapeutic facilities developments. It is playing a crucial role in training generations of doctors, nurses, and allied health professionals who serve both within Kerala and beyond all over the world.

This document is an important effort to present the services, achievements, academic activities, innovations, and future vision of the Medical College Hospital to people. It provides valuable insights for policymakers, administrators, and health professionals striving to strengthen Medical Colleges and make them Centres of Excellence.

I commend the dedicated efforts of the entire team who have contributed to the growth of this institution and in preparing this document.

I wish all the success to future endeavours.

Pinarayi Vijayan

The Addl. Chief Secretary
Health Dept.
Email: acskeralahealth1@gmail.com



Smt. Veena George

Minister for Health &
Family Welfare
and Woman & Child Welfare
Development
Government of Kerala

Message

Medical College Hospitals form the backbone of the tertiary health-care delivery system, serving a dual role as centres of advanced patient care and as institutions for teaching, training, and research. Over the years, the Medical College Hospitals have evolved into comprehensive health-care hubs, providing specialized services to people and nurturing generations of competent medical and allied health professionals.

The Medical College Hospital stands as a testimony to the strength of the public health infrastructure, and access to quality tertiary care. Medical Colleges with its multidisciplinary departments, advanced diagnostic and therapeutic facilities, and dedicated workforce, are playing a pivotal role in addressing the complex health needs, and responding effectively to the tertiary healthcare.

This document systematically captures the services, achievements, innovations, academic activities, and future directions of the Medical College Hospital. It guides not only for institutional review but also for sharing best practices, and proposing policy decisions aimed at further improving health outcomes.

I appreciate the collective efforts of the Medical College Team who have contributed to the growth of this institution.

I also appreciate the contribution of the doctors, paramedical staff and support staff for preparation of such an extensive document.

I wish success in all future endeavours.



Veena George



Preface

The Government has been taking various initiatives to build up a 'knowledge economy'. It gives mandate to build institutions entrusted with the responsibility of knowledge transfer in the respective domain areas. The Department of Health and Family Welfare has been taking a multipronged approach for development of health sector. Aardram Mission-1 focused at infrastructure development and Aardram Mission – Nav Kerala Karma Padhathi-2 continued its focus on various health programs and health system improvement measures.

The Department has given utmost importance towards the foundational field of Medical Education. Over time, our various medical colleges and medical college hospitals have been further developed by improving infrastructure, designing patient focused facilities, procuring various modern diagnostic equipment and measures and implementing state-of-the-art treatment avenues. These initiatives are supported by human resource management as well as human resource development. Strong governance of medical education and tertiary healthcare institutions development have resulted into qualitative improvement in health service delivery to all.

While discussing with the team, it was felt that a detailed document of these developments will not only inform regarding developments but it will also help to plan pragmatic future developments in medical colleges and improve health service delivery. The present generation of students will know their institution better and will take a pride in the fact the way these institutions are delivering the results.

This Medical College documentation initiative has been taken with the objective of providing a comprehensive overview of the institution's academic, clinical, administrative, and developmental dimensions. The documentation follows a structured framework covering institutional history, academic offerings, departmental facilities, human resource profile, infrastructure development, specialised programmes, research initiatives, and financial allocation. This approach enables systematic assessment of institutional performance, facilitates benchmarking across medical colleges, and supports informed decision-making at the departmental and policy levels.

Government Medical Colleges are complex institutions that integrate education, service delivery, and research. Effective planning for such institutions demands clarity on capacities, gaps, and future priorities. The preparation of this document has also

strengthened internal coordination, data consolidation, and accountability mechanisms within the institution. Medical Colleges are the worlds within worlds. This was not a simple task. It took months to prepare the documents! Even though to begin with there were questions regarding need of documenting, the teams took continuous efforts and the documents are prepared. The reader may feel that there a few things missed out but these documents will be always the foundation for the next editions and the posterity will understand about its value and utility.

I commend the collective efforts of those who have taken committed efforts to complete the tasks. Principals, hospital superintendents, faculty, administrative teams, and departmental units involved in this exercise.

The institutions are built by all working in the institutions right from the cleaners, security guard to the Principal and Superintendents. The students, both the undergraduate and postgraduate, have the idealism and energy. They should also contribute in a big way to betterment of systems and processes. The seniors should build such enabling environment that encourages taking initiatives in various field of medical science. It is our confidence that such 'thinking students' will not only understand the deeper meaning of gaining knowledge and skills but also put it to practice for the betterment of the society.

I am confident that this document will serve as a valuable reference for policymakers, administrators, and academic leaders, and will contribute meaningfully to the continued strengthening of Government Medical Colleges in Kerala and become the Centre of Excellence.

Dr Rajan Khobragade IAS

Additional Chief Secretary
Health & Family Welfare and
AYUSH Department
Govt of Kerala.

Message



Government Medical College, Thiruvananthapuram, Kerala's first medical college established in 1951, has grown into a premier institution of medical education, healthcare, and research. Over the decades, it has evolved into a multidisciplinary centre of excellence, serving patients from across the state while nurturing generations of medical professionals.

This Health Document reflects that journey, highlighting the college's academic strengths, clinical services, infrastructure, and research initiatives. It stands as a testament to the institution's enduring commitment to compassionate care and innovation in medical science.

I commend the Special Officer, Principal, faculty, and staff for preparing this comprehensive report. It will serve as a valuable reference for planning and policy, supporting the Directorate of Medical Education in strengthening Government Medical Colleges across Kerala.

I am confident that this compilation will further reinforce the Government Medical College, Thiruvananthapuram's role as a leader in advanced medical training, research, and patient care.

Dr. K. V. Viswanathan
Director of Medical Education
Government of Kerala

Message



Government Medical College, Thiruvananthapuram, established in 1951 as Kerala's first medical college and inaugurated by Prime Minister Jawaharlal Nehru, has for over seven decades stood as a beacon of excellence in healthcare and medical education. From its pioneering beginnings, the institution has continually evolved, adapting to the changing needs of society while upholding the highest standards of compassion, professionalism, and innovation.

This Health Document reflects that journey—tracing the college's transformation into a premier center of learning and healing, where generations of doctors have been nurtured and countless patients have found solace. Today, GMC Thiruvananthapuram is recognized as a referral hub for advanced medical care, a vibrant academic community spanning undergraduate to super-specialty programs, and a crucible for research that contributes to the progress of medical science in Kerala and beyond.

More than a record of achievements, this document seeks to capture the spirit of the institution—its people, its purpose, and its promise. It is a testament to the dedication of faculty, staff, and students who have carried forward the vision of its founders, and to the resilience of a system that continues to serve humanity with knowledge and compassion. For students, professionals, policymakers, and the wider community alike, it reaffirms the enduring impact of an institution that has become synonymous with trust and care.

As you turn the pages ahead, I invite you to discover the multifaceted identity of Government Medical College, Thiruvananthapuram—an institution that blends tradition with innovation, and service with scholarship. May this document stand not only as a chronicle of progress but also as a reminder of our collective responsibility to advance the cause of health and humanity.

Dr. P K Jabbar

Principal,

Govt. Medical College, Thiruvananthapuram

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CHAPTER 1

OVERVIEW

1.1. Introduction

Government Medical College, Trivandrum is the premier medical institution in Kerala, with a distinguished legacy spanning over 74 years. Inaugurated by the Honorable Prime Minister of India, Shri Jawaharlal Nehru, on 27 November 1951, the college began with an initial intake of 80 students. Over the past seven decades, it has evolved into one of the leading medical colleges in India, currently admitting 250 MBBS students annually, in addition to offering a wide range of postgraduate, super-specialty, and paramedical courses. Students from across the length and breadth of the country pursue their academic training at the institution.

In terms of clinical services, the Medical College Hospital is among the busiest in the state, managing one of the highest outpatient and inpatient loads across multiple specialties and super-specialties. The institution is also one of the few in Kerala to perform renal and liver transplant surgeries. Faculty members provide consultation, liaison, and academic support to national institutes such as the Sree Chithra Institute of Medical Sciences and Technology, the Regional Cancer Centre, and the Child Development Centre, all located within the campus.

The institute also maintains academic collaborations with leading institutions, including the Indian Institute of Science Education and Research (IISER), the College of Engineering, Thiruvananthapuram (CET), the National Institute of Speech and Hearing (NISH), and Institute for Communicative and Cognitive Neurosciences (ICCONS), leveraging the interface between medicine and technology to serve the community. In addition, the alumni association has established a Learning Resource Centre with internet facilities and a Knowledge Centre that fosters interdisciplinary brainstorming not only in medicine, but also in allied fields such as engineering, technology, artificial intelligence, and literature.



Figure 1. Government Medical College Thiruvananthapuram Golden Jubilee Gate

FACTSHEET

Table 1. Details of the Government Medical College Thiruvananthapuram

Full Name	Government Medical College Thiruvananthapuram
Established	1951
Type	Government
Location	Medical College P. O., Thiruvananthapuram – 695011, Kerala, India
Parent Hospital	Government Medical College Hospital (GMCH) & Sree Avittam Thirunal Hospital (SATH)
Extension Units	Institute of Chest Disease, Pulayanarkotta Regional Institute of Ophthalmology Rural Health Training Centre, Vakkom Urban Health Training Centre (Integrated Family Health Centre), Pangappara
Allied Institutions	Priyadarshini Institute of Paramedical Sciences (PIPMS) College of Pharmaceutical Sciences

Affiliation	Kerala University of Health Sciences (KUHS), Thrissur
Academic Recognition	National Medical Commission (NMC), India
Campus Size	Over 114 acres
Key Historical Note	The first medical college in the state of Kerala played a pivotal role in establishing the modern healthcare system in the region.
Contact details	principalmct@gmail.com 0471-2528055

1.2. History

Government Medical College, Thiruvananthapuram, first medical college in Kerala was established in 1951, affiliated with Kerala University of Health Sciences.

First Medical College in Kerala: Established in 1951

The history of the Medical College begins with the construction of the Sree Avittam Thirunal Hospital for Women and Children by the Travancore royal family. Sree Avittam Thirunal, the Crown Prince of Travancore, died of rheumatic heart disease at a young age, prompting the then Maharaja, Sree Padmanabha Dasa Chithira Thirunal Balarama Varma, to establish this unique institution - one of the first of its kind in India. In 1948, the Government of Travancore appointed a committee to formulate proposals for establishing a medical college in Thiruvananthapuram. The committee submitted its report, and the scheme was sanctioned in October of the same year. Dr C. O. Karunakaran was appointed Special Officer to oversee the implementation of the scheme and later became the college's first dean. The foundation stone of the Medical College was laid by the Raja Pramukh of Travancore-Cochin, Sree Padmanabha Dasa Vanchipala Chithira Thirunal Balarama Varma, at 11:45 a. m. on 26 January 1950.

The Government Medical College, Thiruvananthapuram, was dedicated by Jawaharlal Nehru at 8:00 am on 27 November 1951 in the presence of Sree Chithira Thirunal. The first group of MBBS students was admitted in August 1951.

In January 1952, the Sri Avittam Thirunal (SAT) Hospital was inaugurated by Rajkumari Amrit Kaur. The hospital was built by the Travancore royal family in memory of Prince Sree Avittam Thirunal, who died at the age of eight from rheumatic heart disease. A men's hostel was opened in 1952, followed by a women's hostel the following year. The 450-bed Medical College Hospital was inaugurated by Prime Minister Jawaharlal Nehru in 1954. The medical college initially comprised the departments of Anatomy, Physiology, Biochemistry, and

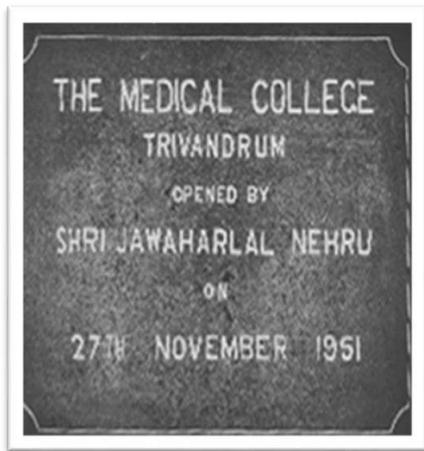


Figure 2 The Foundation Stone



Figure 3. Pandit Jawaharlal Nehru at inauguration

Bacteriology. Dr C. O. Karunakaran served as the first principal of the college, while the respective departments were headed by Dr V. Mathew, Dr C. Vareed, Dr Narayana Rao, and Dr C. O. Karunakaran. The Department of Community Medicine, founded in 1953, was the first of its kind in India.



Figure 4 Dr C. O Karunakaran, First Principal of Medical College



Figure 5 Government Medical College, Thiruvananthapuram, Academic Block

The clinical departments of Medicine and Surgery, along with the college hospital, were established in 1952. Dr R. Kesavan Nair, Chief Surgeon at the General Hospital, was appointed as the first Professor of Surgery. Recognizing the importance of the emerging specialty of orthopedic surgery, the Government of Travancore deputed Dr K. I. George of the Health Services Department to the United Kingdom for advanced training. Dr George joined the college in 1956 and went on to establish Kerala's first Department of Orthopedics.

The Department of Paediatrics, initially functioning under General Medicine, now treats the highest number of patients in Kerala. The Department of Obstetrics and Gynaecology was established in 1954 and later expanded to include a family planning clinic, a contraception testing unit, a WHO training centre, and an infertility clinic. The Artificial Limb Centre was opened in 1964. The Department of Physical Medicine and Rehabilitation, established in 1968, pioneered disability management and the treatment of occupational diseases in India.

The Mental Hospital, established in 1870 by the Honorary Royal King of Travancore, and the Government Eye Hospital, established in 1905, were integrated into the Government Medical College in 1970. The Department of Physical Medicine and Rehabilitation was commissioned in 1972. The College of Pharmaceutical Sciences was opened in 1975 to enhance the quality of teaching, and faculty training programs were initiated in 1976. A Department of Infectious Diseases was established in 1983.

The Department of Bacteriology initially encompassed Microbiology, Pathology, and Hygiene. During the Asian influenza epidemic, the department played a leading role in isolating the influenza virus under the leadership of Dr R. Anantha Narayanan. In 1981, an AIDS Surveillance Centre was established within the department.

Specialty departments were introduced in 1965, beginning with Neurosurgery under Dr M. Sambasivan, former President of the World Federation of Neurosurgical Societies. The Department of Cardiology was established in 1972, followed by Nephrology in 1981. Medical and Surgical Gastroenterology units were established in 1972 and 1975, respectively.

Parallel to the development of medical education in Kerala, paramedical training was also initiated, and Thiruvananthapuram Medical College became one of the first institutions in the state to offer formal paramedical education. In 1961, a one-year certificate course in Medical Laboratory Technology (MLT) was introduced, with classroom and practical training in Pathology, Microbiology, Biochemistry, and Blood Banking. Clinical training was conducted at the Medical College Hospital (MCH) and the SAT Hospital. This period marks the official beginning of MLT education in Kerala. The program was launched under the leadership of Dr Thangavelu, with student training conducted in the Department of Pathology. In 1973, utilizing WHO funding, the School of MLT was established in the Pathology Block. The Priyadarshini Institute of Paramedical Sciences was subsequently established in 1984.

Internship training was initially conducted at the Indo-Norwegian MCH Unit in Neendakara. The department also houses a regional cell for the prevention and control of epidemic and infectious diseases.

To provide field training for students pursuing medical, nursing, and paramedical courses, a Primary Health Centre was established at Cheruvikkal in July 1953. This centre was relocated to Pangappara in 1964 and, in 2020, was upgraded to an Integrated Family Health Centre. It currently functions as an Urban Health Training Centre. The Rural Health Training Centre of the Medical College was established in 2003 through the adoption of the Community Health Centre at Vakkom from the Health Services Department. Both centres of Government Medical College, Thiruvananthapuram, play a pivotal role in undergraduate medical education.

Department of Forensic Medicine, which was initially part of Community Medicine, became an independent department in 1966 under the leadership of Dr V. Kanthasamy. Medico-legal autopsies have been conducted since 1955, and the department was designated as the State Medico-Legal Institute in 1986. The college library was established in the 1960s, and the limb centre, along with the mental and ophthalmic hospitals, was subsequently integrated into the college.

During the 1990s, the Regional Institute of Ophthalmology was founded. The College of Pharmaceutical Sciences and the Priyadarshini Institute of Paramedical Sciences were established, and the Silver Jubilee Auditorium was constructed. A super-specialty block housing the college's medical and surgical specialties became operational on July 1, 2010, funded by the Prime Minister's Swasthya Suraksha Yojana scheme and the Government of Kerala. The multi-specialty block (MSB), equipped with advanced critical care facilities, became operational in 2018. The Clinical Physiology Unit under the Department of Physiology was inaugurated on February 1, 2019, marking the first initiative in Kerala to provide electrodiagnostic studies.

1.3. Administration

The institution operates under a structured administrative hierarchy led by the Principal. The campus is an academic and clinical hub, housing the Medical College Hospital, Sree Avittam Thirunal Hospital, the Centre for Pharmaceutical Sciences (CPS), the Priyadarshini Institute of Paramedical Sciences (PIPMS), and the Multidisciplinary Research Laboratory (MDRL). For decentralized and efficient management, Medical Superintendents oversee the

college hospitals (MCH, SATH, MSB, SSB), and the Director manages the Regional Institute of Ophthalmology (RIO).

Details of Administrators

Principal : Dr. P. K. Jabbar

Vice- Principal : Dr. Usha Devi K. B

Senior Administrative Officer : Mr. Azeem

Director (RIO) : Dr. Sheeba C. S

Superintendents of hospitals:

Govt. Medical College Hospital : Dr. Jayachandran C. G

Sree Avittam Thirunal Hospital : Dr. Bindhu S

Regional Institute of Ophthalmology : Dr. Sunil M S

Head, College of Pharmaceutical Sciences : Dr. Ajith B

Head, Priyadarshini Institute of Paramedical Sciences : Dr Fathima Beevi O

Administrative Medical Officer Pangappara : Dr Althaf. A **Administrative**

Medical Officer Vakkom : Dr Soumya G

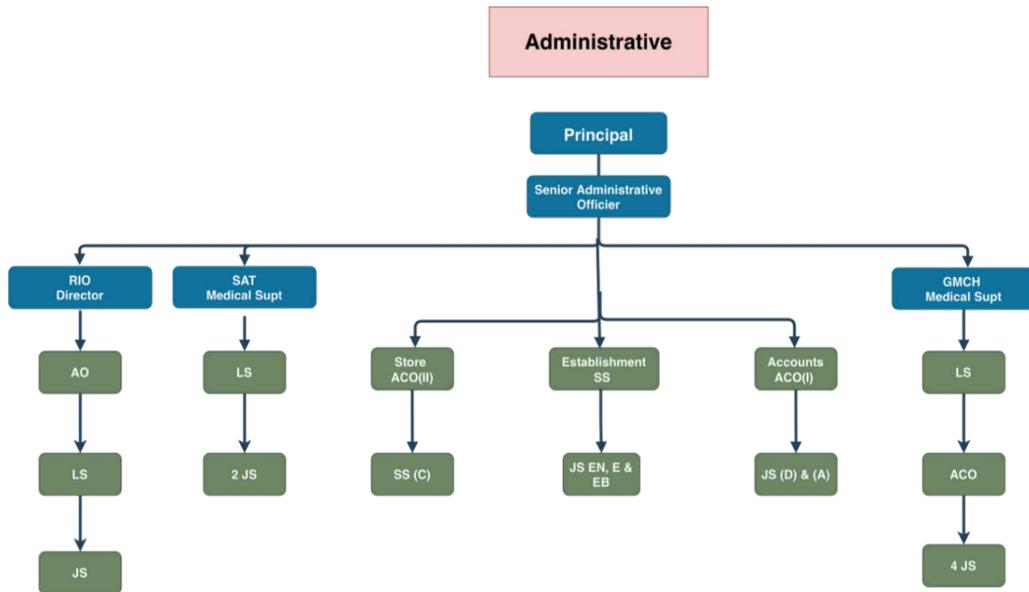


Figure 6 Administrative Organogram of Government Medical College, Thiruvananthapuram

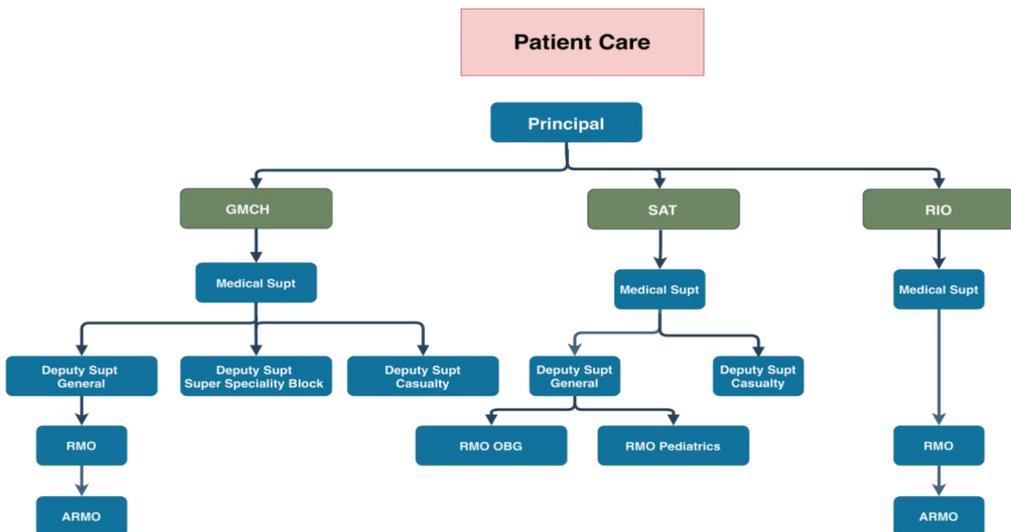


Figure 7 Patient care Organogram of Government Medical College, Thiruvananthapuram

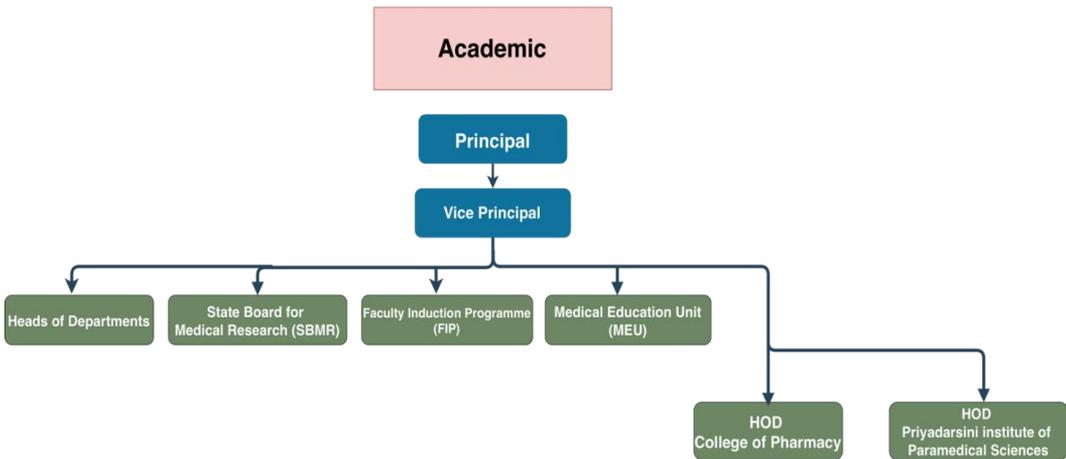


Figure 8 Academic Organogram of Government Medical College, Thiruvananthapuram

Roles and Responsibilities

Principal

Serves as the academic and strategic leader, overseeing curriculum design, faculty development, and long-term institutional planning.

Vice Principal

Coordinates academic operations, supervises faculty activities, manages student assessments, and ensures regulatory compliance.

Medical Superintendent

Directs hospital administration, upholds clinical standards, and ensures quality patient care across departments.

Resident Medical Officer (RMO)

Oversees daily hospital operations, manages emergency services, and facilitates interdepartmental coordination.

Deputy Superintendent

Supports hospital management, monitors compliance, and addresses administrative grievances.

Heads of Departments

Lead academic and clinical units, responsible for teaching, research initiatives, and departmental governance.

Senior Administrative Officer

Handles academic documentation, scheduling, and internal coordination across administrative functions.

Junior Superintendents

Manage section-level tasks, oversee file movement, and ensure proper documentation and procedural compliance.

1.4. Institutional Committees

1. Anti-Ragging Cell

Anti-Ragging Committee Formation – Issued by: Principal,

Order No: B9/19958/2019/GMCT Reference: MCI Letter No. MCI34(1)/2009-Med/25453

➤ Purpose

To implement the Prevention of Ragging Regulation 2009 as framed by the National Medical Commission (NMC), the college has formally constituted an Anti-Ragging Committee to ensure a safe, inclusive, and abuse-free academic environment.

➤ Definition and Scope of Ragging

Ragging includes any form of physical or mental abuse—such as bullying or exclusion—based on identity factors like race, religion, caste, gender, appearance, or economic background.

It is strictly prohibited across all college premises including:

- ✓ Departments, hospitals, hostels
- ✓ Academic, residential, sports, library, and canteen areas
- ✓ Public and private transportation used by students
- ✓ ***Anti-Ragging Committee Members***

➤ Principal	➤ HOD Pharmacy
➤ Vice Principal	➤ Administrative Officer
➤ HOD Anatomy	➤ ACO II
➤ HOD Physiology	➤ LH Assistant Warden
➤ HOD Biochemistry	➤ Asst. Professor, Pharmacy
➤ Director, PIPMS	➤ Asst. Professor, Dental College
➤ PTA Secretary	➤ Chief Security Officer
➤ Warden, Men's Hostel	➤ PTA Executive Officer
➤ Asst. Warden, PIPMS Men's Hostel	➤ College Union Representative

➤ ***Legal and Disciplinary Measures***

Ragging is treated as a cognizable offence, comparable to serious crimes such as rape or caste-based atrocities.

Penalties for convicted students include:

- ✓ Suspension from classes and academic privileges
- ✓ Withholding scholarships, exam access, and results
- ✓ Debarment from events and institutional representation
- ✓ Hostel suspension, rustication (1–4 semesters), or expulsion
- ✓ Fines ranging from ₹25, 000 to ₹1, 00, 000

2. Institutional Compliance Committee and Women Cell

Institutional Compliance Committee (ICC) Reconstitution Women's Cell– Govt. Medical College, Thiruvananthapuram

Reference Number: 226/8965/2014/GMCT dated 24 June 2025

Submitted by: Dr. Jabbar P. K., Principal

➤ **Purpose**

The document announces the reconstitution of the Institutional Compliance Committee (ICC) under the POSH Act (Prevention of Sexual Harassment) to ensure a safe and respectful workplace for women employees at Govt. Medical College, Thiruvananthapuram.

➤ **Committee Members**

Presiding Officer Vice Principal

Members Associate Professor

Professor & Head (Psychiatry)

Professor, Anatomy

ACO

CNO

Former Chairperson, POSH Local Committee / Trustee, Sakhi Women's Resource Centre

Student Union Chairperson

Student Representative

3. Grievance Redressal Committee for Students (GRCS)

Issued by: Dr. Jabbar P K, Principal

Date of Issue: 23-06-2025

Valid Until: 10-01-2028

Reference Numbers: • 12764/2020/N/PSE/KAS dated 15. 03. 2021

• 17596/N2/PSE/KAS/PE/2023 dated 15. 06. 2023

• G/7253/2023/SKOTI dated 23-06-2025

➤ **Purpose:**

Formation of a formal committee to address student grievances at the college, in accordance with procedural guidelines.

➤ **Committee Members**

Chairperson Vice Principal

Secretary Prof & HOD, General Medicine

Members

Professor, Orthopaedics

PG Hostel Assistant Warden, Physiology

PG Men's Hostel Assistant Warden, Medicine

Assistant Professor, Biochemistry – UG Men's Hostel Assistant Warden

Professor, Anatomy – PG Professor

2022 MBBS Batch, College Union Chairperson

2023 MBBS Batch, Union General Secretary

2022 MBBS Batch, UUC

2024 PG, UUC

4. Students Support and Guidance Cell

The Student Support and Guidance Cell is a holistic initiative aimed at nurturing the academic, emotional, and personal well-being of health science students in Govt Medical College Thiruvananthapuram.

➤ **The Student Support and Guidance Cell**

A student's support and guidance cell, which is functioning as part of the KUHS Student Support and Guidance Programme (SSGP), is a flagship initiative by the Kerala University of Health Sciences (KUHS) designed to promote the overall development of students enrolled in its affiliated colleges. It functions as a

structured support system that addresses academic challenges, personal concerns, and psychosocial issues faced by undergraduate and postgraduate students in health sciences.

➤ **Key Objectives**

- ❖ Holistic Development: Focuses on nurturing students intellectually, emotionally, and socially.
- ❖ Academic Support: Helps students overcome learning difficulties and adapt to the demands of health science education.
- ❖ Personal and Career Guidance: Offers individualized counselling for personal growth, career planning, and academic improvement.
- ❖ Health and Well-being: Addresses physical, mental, and reproductive health concerns through early interventions.
- ❖ Mentorship Integration: Works in tandem with mentor-mentee systems to ensure continuous support and monitoring.

➤ **Structure and Implementation**

- ❖ Each college appoints trained faculty members as nodal officers who coordinate SSGP activities.
- ❖ These officers, along with mentors, identify student issues early and provide timely interventions.
- ❖ Activities include counselling sessions, workshops, awareness programs, and referral services for specialized support.

➤ **Committee Members**

Chairperson: Vice Principal

Nodal Officer: Assistant Professor of Physiology

5. College Discipline Committee

The Discipline Committee of Government Medical College Thiruvananthapuram plays a pivotal role in maintaining decorum, ethical conduct, and institutional integrity among students and staff.

➤ **Overview:**

The Discipline Committee at Government Medical College, Thiruvananthapuram (GMCT) is a statutory body constituted to uphold the code of conduct and ensure a safe, respectful, and academically conducive environment on campus. It operates under the guidance of the principal and aligns with the standards established by the Kerala University of Health Sciences (KUHS) and the National Medical Commission (NMC).

➤ **Key Objectives**

- ❖ **Maintain Campus Discipline:** Monitor and address violations of college rules, including academic misconduct, ragging, harassment, and disruptive behavior.
- ❖ **Promote Ethical Conduct:** Encourage professionalism, punctuality, and respectful interactions among students and staff.
- ❖ **Ensure Due Process:** Investigate complaints impartially and recommend appropriate corrective or punitive actions.
- ❖ **Support Preventive Measures:** Organize awareness programs on discipline, ethics, and student responsibilities.

➤ **Composition**

Chairperson: Vice Principal

Members Faculty Members

Student Representatives

Warden

6. Infection control committee

An Infection Control Committee operates in four of the five listed institutions under the Medical College Hospital umbrella. The committee is led by the Superintendent and includes heads of departments, microbiologists, and nursing leadership.

➤ **Key Activities:**

The primary functions across the active committees include:

- ❖ Holding regular monthly meetings.
 - ❖ Conducting sanitary and infection control rounds in wards and ICUs.
 - ❖ Training and orienting staff (including cleaning personnel) and students.
 - ❖ Surveillance and audit of healthcare-associated infections (HAI) and antibiotic use.
 - ❖ Supervising biomedical and general waste management.
- **Notable Details:**
- ❖ Medical College Hospital has the most comprehensive program, with activities like link nurse systems, small group learning sessions, and vector control.
 - ❖ Sree Avittam Thirunal Hospital and Regional Institute of Ophthalmology run structured programs with regular meetings and staff training.
 - ❖ Rural Health Centre, Vakkom, focuses on core environmental activities like premises cleaning, waste management, and soak pit maintenance.
- **Committee Members**
- | | |
|-----------------------------|---------------------|
| <i>Chairman</i> | Superintendent GMCH |
| <i>Member Secretary</i> | HOD Microbiology |
| <i>Members</i> | |
| Deputy Superintendent | |
| RMO | |
| HOD 21 Clinical Departments | |
| State PEID cell coordinator | |
| Nursing Superintendent | |
| Nursing Officer | |
| Infection Control Nurses | |

Housekeeping Supervisor

Store Superintendent

Biomedical Engineer

Infection Control Officer

7. Students Innovation Cell

The Innovation Club at GMC Thiruvananthapuram fosters a culture of problem analysis, reasoning, troubleshooting, and creative thinking to solve real-life problems among medical students and faculty. By encouraging interdisciplinary collaboration, the club aims to develop innovative solutions for healthcare challenges.

➤ Club Activities:

- ❖ KDISC- YIP - GMC Thiruvananthapuram is a domain institution of KDISC - YIP. We have submitted a total of 18 projects for YIP5, YIP6, and YIP7. 6 teams of GMC Thiruvananthapuram were selected for the state-level competition.
- ❖ Bio 360 by KSIDC & KMTC Active participation. A stall with displays of the student projects was set up.
- ❖ IEDC(KSUM) Launched the first IEDC in the Government Medical College in September 2025.
- ❖ Out of the 32 teams selected from all over Kerala, one team was from GMC TVM, the first Government Medical College in the state to be selected in the final level of YIP 5. 0.
- ❖ One student-led project has received funding from the NIDHI PRABAS program of DBT.
- ❖ One faculty idea/project submitted to ICMR - first in the world challenge. (for innovative research).
- ❖ Conducted more than 25 ideation and brainstorming sessions for problem-solving for students.
- ❖ Conducted a one-day workshop on bio entrepreneurship for medical students.

➤ **Impact:**

- ❖ Enhances critical thinking and problem-solving skills.
- ❖ Bridges the gap between medical education and technological advancements.
- ❖ Prepares students to be future healthcare innovators.

➤ **Way ahead:**

- ❖ To set up an Incubation centre primarily for the Biomedical and healthcare innovation, research, and development.
- ❖ To sign an official MOU with KSUM and CET.
- ❖ Conduct regular faculty development programs in innovation and entrepreneurship.

To conclude, Innovation Club empowers medical students to think beyond textbooks, adapt to new challenges in healthcare through innovation and contribute meaningfully to the evolving healthcare landscape.

8. Institute Ethics Committee

A vital body for reviewing research proposals to ensure ethical standards, with members from medical, legal, and social fields, responsible for safeguarding participants and overseeing research integrity.

➤ **Purpose:**

To review research involving human participants, ensuring scientific validity and ethical conduct, often working alongside the IRC (Institutional Review Committee).

➤ **Composition**

Chairperson	Retd. Principal & HOD Pharmacology (external member)
Member Secretary	Prof & HOD Pharmacology
Clinician	Prof Geneticist
Basic Medical Science	Prof & HOD Pharmacology (external member)

Social Scientist	Associate Professor Sociology
Scientific member,	Associate Professor of Microbiology
Legal Expert	Member, Central Prison and Corrections (external member)
Basic Medical Scientist,	Associate Professor, Pharmacology
Lay Person	Guest Faculty, IMG

9. Institute Review Committee

Vital body for evaluating scientific validity, assessing risks vs. benefits, ensuring proper subject selection and consent, monitoring ongoing studies, and requiring modifications or disapproving unethical research.

➤ **Purpose:**

To protect the rights, safety, and welfare of human research subjects by reviewing research proposals involving people, ensuring ethical conduct, minimizing risks, and verifying that potential benefits outweigh harms, thus upholding scientific integrity and legal compliance.

➤ **Composition**

Nodal Officer:	Professor, Community Medicine
Members:	Professor Pathology, HOD Medical Gastro, HOD Neurology, Professor Paediatrics Assistant Professor Endocrinology, Associate Professor Community Medicine, Lecturer in Biostatistics Community Medicine, Additional Professor (CAP) Neurosurgery

CHAPTER 2

DEPARTMENT FACILITIES AND ACADEMICS

Government Medical College, Thiruvananthapuram, stands as one of Kerala's premier institutions for medical education, healthcare, and research. Established with a vision to provide world - class training and patient care, the college has grown into a multidisciplinary hub with well-structured departments, advanced facilities, and a strong academic framework. Each department is equipped with modern infrastructure, specialized laboratories, and dedicated faculty, ensuring comprehensive learning and clinical exposure for students. The institution not only emphasizes academic excellence but also fosters innovation, community service, and holistic development, making it a cornerstone of medical education and healthcare delivery in the region. Initially, it was affiliated with the University of Kerala; in 2010, it became affiliated with the Kerala University of Health Sciences.

2. 1 Pre - clinical Departments

2.1.1. Anatomy

The Department of Anatomy at GMC Thiruvananthapuram is a premier centre for anatomical education, training, and research. The department provides comprehensive training to undergraduate and postgraduate students in Anatomy, with a strong emphasis on foundational learning, dissection-based teaching, and applied anatomy. Focuses on the study of human body structure, providing essential knowledge of organs, tissues, and systems to support medical education and research. In addition to academic training, the department regularly conducts collaborative workshops for various clinical specialties, including Orthopaedics, Neurosurgery, Cardiovascular and Thoracic Surgery, and Obstetrics & Gynaecology postgraduate trainees. These programs bridge basic and clinical sciences, enhancing surgical orientation and skill development.

The department also maintains a well-established cadaver embalming facility, undertaking embalming procedures for cadavers, and coordinating their transportation both within the state and outside Kerala. An average of 70-80 embalming is done per year. This service supports medical education, research, and inter-institutional academic activities.

Apart from embalming donated bodies for educational purposes, the department also provides embalming services for interstate and international transportation of human remains, strictly adhering to prescribed legal, ethical, and health regulations.

The department also actively engages in community outreach by providing anatomy specimens to schools for educational exhibitions and conducting body donation campaigns. Through awareness talks and public interactions, these initiatives help educate society about the importance of anatomical studies and encourage voluntary body donation for medical education and research.

2.1.2. Physiology

The Department of Physiology, GMC Thiruvananthapuram, is dedicated to teaching, research, and clinical services and is largely successful in its endeavour for excellence in the field. The Department offers a range of clinical laboratory services to support patient care, operating through its Clinical Physiology Unit, which is a unique facility offering specialized services. Clinical Physiology Unit stands out for its Nerve Conduction Studies (NCS) and Pulmonary Function Tests (PFTs). Since its inception, the department has successfully conducted over 5,000 PFTs and over 200 Nerve Conduction Studies. Additionally, the Department offers Heart Rate Variability (HRV) tests in the Autonomic Function Test Lab, located within the Multi-Disciplinary Research Laboratory. The Clinical Physiology Unit provides electrodiagnostic studies, which include Nerve Conduction Studies, Pulmonary Function Tests, Autonomic Function Tests, Electroencephalograph, Electromyograph, Visual Evoked Potential, Electroretinography, and Brainstem Evoked Response Audiometry (BERA). These help in the diagnosis and planning of treatment of diseases affecting the lungs, heart, nervous system, muscular system, vision, and hearing. Numbers of nerve conduction studies done through the electrophysiology lab includes 8 studies in 2023, 51 in 2024, and 29 studies in 2025.

2.1.3. Biochemistry

The Department of Biochemistry started its functioning in 1951 under the leadership of Dr. D. Narayana Rao for teaching and training medical graduates and for providing clinical laboratory services to the patients. The postgraduate training for MD in Biochemistry started in the year 1970, and from 2011 onwards, the annual intake has been 4 students. Eighteen

professors succeeded him as HODs, and currently, the department is under the headship of Prof. Dr. Genga. S.

The Department of Biochemistry is an academic preclinical department that is actively involved in teaching, training, research, and laboratory services for patient care. Undergraduate courses under the department include MBBS, BDS, BSc Optometry, BSc Nursing, Post-basic BSc Nursing & various allied health science courses. The department provides training for MD Biochemistry students, PhD scholars, and MBBS students. The various clinical laboratories under the department are the Central Biochemistry Lab, the Medical College Hospital, the SAT Biochemistry Lab, and the PG research lab in the academic block. Around 2000 patients (IP & OP) utilize this facility per day.

The two clinical labs, one at Medical College Hospital and one at SAT hospital, provides 24 hrs laboratory services to the patients attending these hospitals. Around 2000 patients (IP & OP) utilize this facility per day. The tests done include basic biochemistry panel tests and special investigations like immunoassays and electrophoresis. The facility at MCH - Central Biochemistry lab has state-of-the-art, fully automated clinical chemistry analysers, immunoassay analysers, and a fully automated electrophoresis apparatus. The SAT Biochemistry lab also has fully automated clinical chemistry analysers. The department accepts the samples and provides the results through an e-health system.

The department also has a PG research laboratory where screening for inborn errors of metabolism is also done. Lab management solutions were initiated as part of an e-health programme. Started doing Molecular Biology related research projects for MD students in collaboration with MDRL. The Central Biochemistry lab, MCH, is equipped to conduct comprehensive routine biochemistry investigations, hormonal assays, tumour markers, and protein electrophoresis. On average, 12500 to 15000 investigations are done each day with a total monthly workload of 3, 50, 000 investigations.

2. 2. Para - clinical Departments

2. 2. 1 Pharmacology

The Department of Pharmacology at GMC, Thiruvananthapuram, is a dynamic academic and research hub that trains both undergraduate and postgraduate students. It employs modern

teaching methods like CAL software, mannequin demonstrations, and simulation models, alongside competency-based training in drug administration. Through regular workshops on Good Clinical Practice, regulatory guidelines, antimicrobial stewardship, and pharmacovigilance, the department enhances clinical competence and reinforces research ethics.

The department plays a **critical role in the Institutional Ethics Committee** by providing scientific expertise, ensuring rational drug use, and safeguarding participant welfare. Its involvement strengthens the ethical review process, promotes responsible research practices, and contributes to the advancement of safe and effective therapeutics. It excels in academics, research, and public engagement. Also leads in pharmacovigilance, antimicrobial resistance awareness, and innovative teaching for holistic medical education. A major milestone achievement is the publication of the Kerala State Drug Formulary (3rd Edition, 2024). Research contributions include participation in multicentric randomized controlled trials, presentations at esteemed conferences, and publications in reputed journals. Through initiatives under the National Medical College Network (NMCN), the department has developed digital learning materials aligned with the UG curriculum.

ADR Monitoring Centre: Thiruvananthapuram Medical College is a designated centre for monitoring adverse drug reactions under India's Pharmacovigilance Programme (PvPI). Pharmacovigilance ensures the safe and effective use of medicines by identifying, assessing, understanding, and preventing adverse effects, ultimately protecting public health

2. 2. 2. Microbiology

When GMC Thiruvananthapuram was established in 1951, the laboratory medicine function began as a combined Department of Bacteriology alongside anatomy, physiology, and biochemistry. That original bacteriology unit included early microbiology, pathology, and hygiene activities. From the start the department provided diagnostic microbiology services to the MCH and supported clinical training for undergraduate students. In the decades that followed the laboratory played an active role in responding to infectious disease events. Teaching and postgraduate training Microbiology is part of the college's clinical and academic structure and now offers postgraduate training (MD in Microbiology), contributing

to specialist workforce development and to diagnostic and infection-control services at MCH. Coordinates the Hospital Infection Control Committee of the institute and ensures implementation of infection control practices to prevent and contain infections within the hospital. Department gives microbiology training to students of various UG and PG courses. The department is providing 24-hour laboratory service to the public.

The following activities of national importance are carried out through the Department for various State Reference Laboratory for HIV and STI, Viral Research Diagnostics Laboratory (VRDL) under DHR-ICMR Scheme ICMR recognized testing centre for SARS CoV2, Influenza, Zika and Monkey Pox, Hospital based sentinel surveillance of Streptococcus pneumoniae and other invasive bacterial diseases (HBSSS and IBD), National Viral Hepatitis Surveillance of Viral Hepatitis, Surveillance of Congenital Rubella syndrome, **KARSAP** (Kerala Antimicrobial Resistance Strategic Action Plan) – **State Nodal Centre** -The KARSAP has been developed involving multiple sectors and it addresses a wide range of activities required to tackle Anti-Microbial Resistance problem effectively. Department of Microbiology, GMC, Thiruvananthapuram has been the nodal centre since then. Performs WHONET data entry and analysis, KARS-NET review meetings, and training workshops for network laboratories.

2. 2. 3. Pathology

The Department of Pathology is running five Service Labs rendering 24-hour lab service, which include routine blood and urine examination, bone marrow and other special investigations, Cytology study of cervical smear, Fine Needle Aspiration Cytology from different sites, and histopathology examination. The samples are received from Medical College Hospital, SAT Hospital, and other peripheral Government hospitals. Pathologists are one of the team members for organ transplantation, mainly the kidney and Liver. Outreach services extend these capabilities beyond the parent institution, offering expert opinions and diagnostic support to other hospitals, clinics, and laboratories. This collaborative approach enhances patient care, especially in resource-limited settings.

2. 2. 4. Forensic Medicine

The Department of Forensic Medicine has been functioning since the early 1950s, providing reliable and credible medicolegal services to the districts of Thiruvananthapuram and,

earlier, Kollam. With an annual autopsy workload exceeding 3,000 cases, the department handles a wide spectrum of complex deaths with meticulous documentation and evidence presentation before various courts. In addition, it undertakes clinical forensic examinations across diverse criminal contexts. As a leading centre for training and research, the **State Medicolegal Institute** offers short-term induction and in-service training for magistrates, civil judges, and police personnel of different cadres. The department is currently exploring the introduction and integration of virtual autopsy facilities with guidance and support from the Government.

The mortuary at Government Medical College, Thiruvananthapuram, is under the Forensic Medicine Department. It is a modern, high-tech unit built in the multi-speciality block with 48 chambers, multiple autopsy tables, and specialized facilities for decomposed bodies. Handles autopsies (post-mortems) for accidents, suspicious cases, and other cases from Thiruvananthapuram and surrounding areas

2. 2. 5. Community Medicine

Established in 1953, the Department of Community Medicine, Government Medical College, Thiruvananthapuram, is the first of its kind in India. It is the premier public health training and research institution for medical professionals in the state of Kerala. The prime objective of the institution is to produce quality public health professionals, capable of playing major roles towards the realization of complete health and well-being in the state of Kerala and other Indian states. The department offers a postgraduate course for medical professionals. The department moulds the undergraduate medical students towards being public health-minded while pursuing their careers in any specialty. The Department has an Urban Health Training Centre at Pangappara and a Rural Health Training Centre at Vakkom, where all the students are empowered in Primary Health Care.

The Department, along with the State Prevention of Epidemic and Infectious Diseases Cell, which is also under the additional charge of the Head of the Department of Community Medicine, provides expert consultations to the Government of Kerala in tackling all public health emergencies. The Department functions in tandem with various government departments and agencies such as District Collectorate, Directorate of Health Services,

District Medical Office, Disaster Management, State Health Systems Resource Centre, National Health Mission, and so on, as required by providing expert human resources and consultations. The department promotes quality medical research and collaborates with governmental and non-governmental agencies in carrying out public health activities all over the state. Research methodology workshops are conducted every year for all the postgraduate students in the institute, empowering them to undertake their thesis work. The Student National Conference, conducted every year, provides a platform for medical students across the country to exchange ideas, present research, and discuss public health challenges. Key sessions focused on **health equity, primary care innovations, and national health programs**, encouraging students to engage in evidence-based practices. Networking opportunities allow participants to connect with peers, faculty, and public health experts, fostering collaboration for future initiatives. Research Methodology Workshop emphasizes the importance of **scientific inquiry and critical thinking** in community medicine. This experience nurtures **responsible research practices** and awareness of ethical considerations in human studies.

Under the Family Adoption Initiative (FAP), each student adopts a family from the community to provide continuous health monitoring and support. This program strengthens the bond between medical students and the community, reinforcing the principle of **community-oriented primary care**. Epidemic investigation is a cornerstone of community medicine, equipping future physicians with the skills to identify, analyse, and control outbreaks. The combination of academic exposure (conference, workshops), practical training (epidemic investigation, SBMR), community engagement (FAP, NTEP), and ethical research involvement (IRC) provided a **holistic learning experience in community medicine**. These activities not only strengthen technical skills but also instil values of empathy, responsibility, and public health leadership.

Preventive clinic

A 24 hours Preventive clinic in Government Medical College Thiruvananthapuram is managed by the Department of Community medicine where Adult Immunisations are provided especially Anti Rabies vaccination and Immunoglobulin administration. Cases from periphery including neighbouring districts are referred here for expert opinion. The

Department of Community Medicine also runs a **Local OP** catering to the nearby local population since Government Medical College Thiruvananthapuram is a referral centre.

2. 3. Clinical Broad Specialty Departments

GMC Thiruvananthapuram is the largest multi-speciality treatment centre which provides affordable and comprehensive care under the state sector. During the inauguration of the college in 1951, he sustained a minor finger injury caused by a metal grill and was treated by the institution's founding Superintendent, Dr Kesavan Nair. This unique event makes Jawaharlal Nehru both the inaugurator of the institution and the first patient treated at the hospital.

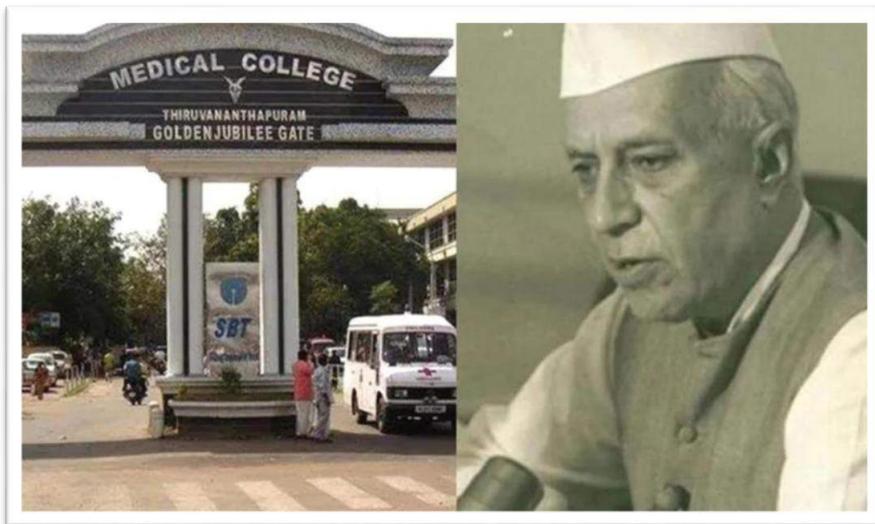


Figure 9 Jawaharlal Nehru both the inaugurator of the institution and the first patient treated at the hospital

2. 3. 1 Anaesthesiology

The Department of Anaesthesiology manages patient care before, during, and after surgery, specializing in pain management and administering anaesthesia to ensure patient safety and comfort. The department provides pre-operative, intra-operative, and post-operative care, including critical care, pain management, and resuscitation. Manages well-equipped Operation Theatres (OTs) with modern anaesthesia machines, ventilators, multi-parameter monitors, and specialized equipment for difficult airways and pain blocks. The department

manages various surgical specialties like General Surgery, Neurosurgery, Orthopaedics, Paediatrics, ENT, and more, within dedicated OTs. The department has a crucial role for the entire hospital's surgical functions and continuously training anaesthesia specialists for the country.

The Pain & Palliative Care services at Trivandrum Medical College are provided through dedicated clinics such as the *Pratheeksha Palliative Care Unit* at SAT Hospital, the *Palliative Care Clinic* under the Department of Community Medicine, and the *Regional Cancer Centre (RCC)*, all of which are part of the Medical College campus in Thiruvananthapuram.

2.3.2 Dermatology and Venerology

The Department of Dermatology was established in 1954. Professor (Dr.) B. M. Ambadi Bhaskara Menon became the first Head of the Department and retired in 1968. The prestigious annual Ambadi Oration is named in his honour. The Dermatology Department started postgraduate training (MD) in 1978 with two PG seats. Currently there are 6 postgraduate seats, from 2017 onwards. The first Cosmetology clinic and theatre in Kerala, was started in the Department of Dermatology, Government Medical College, Thiruvananthapuram, by Prof. (Dr.) K. Yogiraj, and Dr. T. V. Gopalakrishnan in 1998.

The dermatology department's diverse clinics ensure holistic care for patients with skin disorders. By combining clinical service, education, and research, these clinics contribute significantly to patient welfare and academic excellence. The OPD provides a wide range of **diagnostic, therapeutic, surgical, cosmetic, and counselling services** like skin biopsies, electrosurgical procedures, cryosurgeries, chemical peels, skin grafting, intra lesional injections, nail surgeries, PUVA therapy.

2.3.3. Emergency Medicine

The new emergency department has started functioning from September 1, 2019 with upgraded facilities for emergency care, a scientific triage system has been introduced. It is one of five medical colleges in the country selected by NITI Aayog and ICMR for emergency medicine research.

The department has been chosen as a **Centre of Excellence** under the National Program for Prevention and management of Trauma and Burns Injuries (**NPPMT&BI**) by the Central

Government in view of the following factors: - Golden Hour initiative for trauma initiated under the State Government and the treatment is free for Patients coming in the golden hour, that is the first 48 hours.

Red tags and Red seal given for trauma patients to avoid delay for investigation & CT. Red zone Surgery with ventilators and Multi-Channel Monitor round the clock. Portable ventilators at Surgery Casualty for effective shifting from casualty to Surgery ICU/CT/MRI/EOT, 24 hours are functioning Emergency Operation Theatre near to the Surgery Casualty with separate tables for Orthopaedics, Neurosurgery, Surgery and OMFS, ENT, CTVS, Plastic Surgery. Robust and vigorous capacity building and training for ATLS, BLS & ACLS for medical and paramedical workers given regularly.



Figure 10. Department of Emergency Medicine

The Emergency Medicine Department currently functions under the following modalities for obtaining the best practices.

1. **Triage - Prioritization done.**
2. **Green Zone:** with 12 beds and monitors for keeping patients who need observation for a short while. Also, vaccination duties are done there.
3. **Yellow Zone:** 53 beds with monitors and central oxygen supply. Here patients are kept for observation, they may get admitted or sent home or to a local hospital if found problem free.
4. **Red zone:** Surgery with 5 Ventilators and casualty with 7 monitors. Separate channel for polytrauma with immediate CT scan and FAST Facilities and direct shifting to EOT without delay.
5. **Medicine Red Zone-** with 10 monitors and chest pain unit with 3 beds and ventilators. Also, 24-hour functioning stroke unit is there in the casualty with 3 CT machines. Also, Orthopaedics, ENT and OMFS casualties with monitors, defibrillators and other facilities.
6. **Emergency Ward-22** is the admission ward for defibrillators, medicine and preoperative stabilisation.
7. **Emergency Medicine Theatre-** with 5 theatres round the clock.
8. **EMICU-** 7 Beds with ventilators and multichannel monitors.
9. **Burns Unit-** Centre of Excellence award was given to the Department of Emergency Medicine

2. 3. 4. General Medicine

The Department of General Medicine is a central pillar of patient care and academic excellence at our institution. Established with the inception of the Medical College, the department provides comprehensive adult healthcare, encompassing expert consultation, precise diagnostic evaluation, and personalized treatment. With a strong commitment to clinical quality and compassionate service, it remains one of the most active and impactful departments in the institution.

The department is structured into six clinical units, supported by a robust and experienced faculty team comprising four Professors, seven Associate Professors, twelve Assistant Professors, and eight Senior Residents. This strong academic environment ensures consistent patient care, effective clinical supervision, and high-quality medical training.

General Medicine caters to one of the highest patient volumes in Government Medical College, Thiruvananthapuram. The department manages ICU beds dedicated to the care of critically ill patients. It further supports specialized services through the Regional Geriatric Centre, ART Centre, and Haematology Department, along with dedicated specialty clinics in haematology, thyroid disorders, and hypertension. In addition to routine services, the department also provides dedicated medical care to the Governor and elected representatives. The department additionally offers several medical board members for institutional and state-level requirements.

As a cornerstone of medical education, the department provides comprehensive instruction for 250 MBBS students annually. Postgraduate training began in 1960, and over the years, the intake has steadily expanded from the initial two seats to the current 24 postgraduate trainees each year. Additionally, the department plays an important role in the training programs of dental, nursing, and paramedical students. The department's academic ecosystem emphasizes clinical skills, bedside learning, and ethical practice.

Research remains an integral part of the department's mission. Faculty members and postgraduate students actively participate in institutional and collaborative research projects, including studies conducted with ICMR and IAV. Through ongoing publications, scientific presentations, and evidence-based practice, the department continues to contribute significantly to national and international medical literature.

With its blend of high-volume clinical service, strong academic foundation, and continuous research activity, the Department of General Medicine remains firmly committed to delivering quality healthcare, nurturing future medical professionals, and advancing the field of internal medicine.

Anti-Retroviral Therapy Centre: The Anti-Retroviral Therapy (ART) Centre at Government Medical College, Thiruvananthapuram functions as a tertiary-level hub for comprehensive HIV care under the National AIDS Control Programme. It provides free antiretroviral drugs, baseline and follow-up investigations, clinical evaluation, management of opportunistic infections, counselling, and adherence support for people living with HIV. As a nodal centre, it supervises and supports multiple Link ART Centres in peripheral hospitals in

Thiruvananthapuram and neighbouring districts, ensuring continuity of care closer to patients' homes.

In addition to routine service delivery, the centre contributes to surveillance and reporting, trains healthcare workers, and implements updated national HIV treatment guidelines within the medical college and its referral network. It has been upgraded to an **ART Plus** centre, enabling initiation and ongoing management of second line and other complex ART regimens in addition to standard first-line therapy. As an ART Plus site under NACO and the Kerala State AIDS Control Society, it undertakes treatment-failure evaluation, regimen modification, management of drug toxicities and co-morbidities, and provides specialist technical support to linked ART units in the region, further strengthening the college's role as a referral hub for advanced HIV care and capacity building.

2. 3. 5. General Surgery

The General Surgery Department Established in 1952, is a well-established unit, offering comprehensive surgical care for various conditions, from basic procedures to advanced laparoscopic surgeries, with multiple surgical units, conducts specialty clinics for Vascular, Breast, Thyroid diseases. They handle a wide range of open and minimally invasive surgeries serving as a major teaching hospital with experienced faculty and modern facilities teaching for both MBBS and PG students, conducting CMEs, workshops and contributing to research.

2. 3. 6. Infectious diseases

The Infectious Diseases Department was established in 1983, is the first established Infectious diseases department in India. The Department takes care of patients with all sorts of infections ranging from tropical infections like dengue to emerging infections like Nipah or Amoebic meningoencephalitis. In this era of antimicrobial resistance, it's the responsibility of the ID department to prevent and treat patients with antimicrobial resistant infections like carbapenem resistant enterobacterial infection. Treatment of infections in immunocompromised, post-transplant settings, chemotherapy etc also come under purview of the department. The department is an integral part of hospital antimicrobial stewardship and Infection control committee. Travel medicine, Outpatient antibiotic therapy, vaccination in immunocompromised etc is also dealt with by the ID department. The infectious disease

department is playing a pivotal role in the functioning of the Outbreak **Monitoring Unit** for early detection and management of infectious disease outbreaks and its control.

2. 3. 7. Obstetrics and Gynaecology

The Obstetrics and Gynaecology (OB-GYN) department at Government Medical College, Thiruvananthapuram (also known as Sree Avittam Thirunal Hospital) is a tertiary care centre focused on maternal and child health. The department handles a high volume of patients, including outpatient care for Antenatal, Gynaecological, Postnatal, and Infertility patients. It also provides specialized services like high-risk pregnancy management, complicated Gynaec surgeries, Gynaec oncology services and infertility treatment. The Obstetrics and Gynaecology department, provides Comprehensive services, including OPD consultations from Monday to Saturday for Antenatal, Gynaecological patients & Postnatal services. Additional specialty services are offered through dedicated clinics such as the Endocrine clinic, Trophoblastic disease clinic, HIV Clinic, Adolescent clinic, Psychiatry clinic and Haematology clinic. The Foetal Medicine department offers High-Risk Antenatal care and Prenatal diagnostic services.

The Department provides Cancer Screening Services, Endoscopy and Laparoscopy surgeries. The facility includes a Labour Room and a Septic Labour Room for delivery and Postnatal care, as well as a mothers intensive treatment unit and a HDU for high-risk patients. There are separate Operating theatres for emergency and Elective cases. The department trains 250 Undergraduate students and 30 Postgraduate students per year.

2. 3. 8. Orthopaedics

The department of orthopaedics started in 1956, providing specialized care for disease of bone, joints and musculoskeletal systems. Presently, the Orthopaedics department caters to 450 outpatients, 200 inpatients, 100 emergencies in casualty, around 50 operations a day and around 30 arthroplasties and arthroscopies are being done a month. The department offers clinical training for students. The services provided cover fracture management, paediatric deformities like CTEV, spine disorders, arthroplasty, arthroscopy, and hand surgery.

2. 3. 9. Otorhinolaryngology (ENT)

The ENT department was established in 1954 at Govt Medical College Trivandrum. The first head of the department was Dr Kurien George (1954 to 1967). The department has developed as a full-fledged specialty over the years. With 3 units, outpatient, inpatient and casualty services are provided. All major, minor and emergency surgeries are done. ENT department of Thiruvananthapuram Medical College is the second Govt institution in Kerala to start cochlear implantation under *Sruthitharangam* scheme of Govt of Kerala from 2012. A total of 92 cochlear implants has been done yet, with 3 cases being bilateral. The department is doing complicated surgeries along with other specialties like neurosurgery, plastic surgery & Oral and Maxillo Facial Surgery. The operation theatre is well equipped. The Audiology department is also well equipped, providing newborn screening for hearing, auditory verbal habilitation for cochlear implanted children and adults in addition to regular services. The department has conducted DNB practical and viva examinations, conducted conferences and awareness programs. Research is also going on simultaneously. The department is the nodal centre for National Program for Prevention and Control of Deafness (NPPCD) in Kerala, with a 4-station temporal bone lab.

2. 3. 10. Paediatrics

The Paediatrics department is housed in Sree Avittam Thirunal (SAT) Hospital in Medical College Campus. General Paediatrics OPDs are conducted on all days except Sundays, while Specialty OPDs are organized twice a week by their respective departments. In addition, dedicated specialty clinics such as Rheumatology, Asthma, Diabetes, Endocrine, Palliative Care, Spino-muscular Atrophy, Haemophilia, Nutrition, Rare Disease, and Genetic Clinics are held once a week to provide focused care. Behavioural Paediatrics OPD services are also available daily, except on Sundays, ensuring comprehensive paediatric healthcare coverage throughout the week.

Specialty Clinics and Services in Paediatrics

- **Respiratory / Asthma Clinic** (Wednesday): Evaluates children with chronic respiratory illnesses, including asthma. Facilities include pulmonary function testing and bronchoscopy for children admitted in the PICU.

- **Comprehensive Haemophilia Treatment Centre:** Provides care for haemophilia patients with active bleeding, factor VIII and IX prophylaxis every three weeks, advanced preventive modalities such as omalizumab therapy, and physiotherapy support.
- **Mittayi Clinic** (Monday): Dedicated to children with type 1 diabetes. Offers free insulin therapy, glucose monitoring strips, insulin pump treatment, and recreational activities to support holistic care.
- **Paediatric Gastroenterology** OPD (Monday & Thursday): Manages children with chronic gastrointestinal diseases.
- **Rheumatology Clinic:** Provides treatment and follow-up for children with chronic rheumatological conditions.
- **Endocrinology Clinic** (Friday): Offers growth hormone therapy for eligible patients and manages endocrine disorders such as precocious puberty, congenital adrenal hyperplasia, and hypothyroidism.
- **Palliative Care Clinic** (Thursday): Provides palliative services, including home oxygen concentrators and BiPap machines for patients in need.
- **Genetic Clinic** (Tuesday): Provides genetic testing, counselling, and preventive services for children with inherited conditions.
- **Autism Nodal Centre** (Behavioural Paediatrics Unit): Offers clinical, therapeutic, and rehabilitative services for children with autism, developmental and behavioural disorders, and intellectual disabilities.
- **Outreach OP Services:** Conducted weekly at Rural Health training Centres in Vakkom and Integrated Family Health Centre, Pangappara, extending paediatric care to the community.
- **District Residency Program:** Postgraduate trainees deliver paediatric care services at Taluk and General Hospitals across Trivandrum District, strengthening healthcare delivery at the peripheral level.
- **The Immunisation Clinic:** Operates within the SAT Hospital campus and provides routine vaccination services for children and adults. It runs mainly during outpatient hours from Monday to Saturday, ensuring accessibility to the public. The clinic

administers vaccines under the National Immunisation Schedule, supports special programs like Pulse Polio, and offers counselling on vaccine safety and schedules. As a referral centre, it plays a vital role in maintaining Kerala's high immunisation coverage and serves as a training hub for medical students and nursing staff. Future plans include expanding adult immunisation programs and integrating digital vaccine tracking systems for better record management.

2. 3. 11. Ophthalmology

Ophthalmic hospital started in 1905, and it became the department of ophthalmology and later in 1995 the hospital was upgraded to the Regional Institute of Ophthalmology (RIO) having Postgraduate courses in ophthalmology and a bachelor's-degree course in optometry. It has 250 bedded hospital with specialized services for retina, paediatric ophthalmology, low vision, cornea and glaucoma clinics, an eye bank, tele-ophthalmology, a uvea clinic, a dispensing lab and contact-lens and cataract clinics

2. 3. 12 Psychiatry

The Department of Psychiatry at Government Medical College Thiruvananthapuram is one of the leading centres for mental health care, training, and research in Kerala. The department offers outpatient services on all days and provides 24×7 emergency psychiatric consultation, ensuring continuous and comprehensive patient care. As an academic centre, the department has one of the highest postgraduate training capacities in the state, providing training to MD Psychiatry, MBBS, BSc and MSc Nursing and other allied health trainees. The department runs a wide range of speciality services, including a Suicide Prevention Clinic, Geriatric Psychiatry Clinic, Child and Adolescent Psychiatry Clinic, and Perinatal Psychiatry Clinic. It also has dedicated facilities for De-addiction Services, with a separate OP and an independent building for addiction treatment.

Nodal Centre for the Addiction Treatment Facility (ATF): Recently, the Ministry of Social Justice and Empowerment, Government of India, selected the psychiatry department as a Nodal Centre for the Addiction Treatment Facility (ATF) by strengthening its capacity for evidence-based addiction management. One clinical unit of the department functions at the Mental Health Centre, Thiruvananthapuram, where we actively contribute to the

rehabilitation of patients with chronic psychiatric conditions, helping them reintegrate into the community. The Department also conducts Disability Assessment Boards in the Medical College to assist eligible patients in obtaining disability certificates, ensuring access to government benefits and social support. In addition, various medico-legal boards mandated by the Honourable Courts are regularly conducted by the department, providing expert psychiatric opinions and supporting the judicial system in complex forensic matters. The department actively conducts training programmes, awareness classes, and community outreach initiatives, promoting mental health literacy among healthcare workers and the public.

The Disability Board at Government Medical College, Thiruvananthapuram certifies various disabilities and enables access to education, employment, and welfare benefits under national guidelines.

The Adolescent Psychiatry Clinic at SAT Hospital provides specialized care for youth mental health issues such as depression, anxiety, and behavioural disorders, along with family counselling. The affiliated Mental Health Centre at Oolampara, with over 500 beds, delivers inpatient and outpatient psychiatric services and rehabilitation programs. Together, these facilities form a comprehensive system addressing disability certification, adolescent mental health, and large-scale psychiatric care. They also serve as teaching hubs for medical students while planning future expansions in digital certification, school-linked psychiatry, and modern rehabilitation services.

2. 3.13. Physical Medicine and Rehabilitation (PMR)

The department offers both OP and IP rehabilitation. Neurological, Musculoskeletal and Rheumatological cases across paediatric to geriatric age groups form the bulk of cases attending here. The department offers comprehensive rehabilitation services including physiatry, rehab nursing, physiotherapy, occupational therapy, orthotics, prosthetics, social rehab etc. The department conducts specific clinics for cerebral palsy, sports injury, obesity, stroke and weekly outreach clinics at Integrated family health centre Pangappara. Also, it provides a 3-year post graduation course in PMR

Regional Artificial Limb Fitting Centre (RALFC): The Medical College is having a dedicated Regional Artificial Limb Fitting Centre established in 1975 under the PMR department focussing on amputee rehabilitation, artificial limb fitting, prosthetics and orthotics.

2. 3. 14. Radiodiagnosis

The Department of Radiology at Government Medical College, Thiruvananthapuram, is a cornerstone of diagnostic and imaging services, offering advanced radiological care, education, and research. The department is equipped with modern imaging modalities including digital X-ray, ultrasound, CT, MRI, and mammography, catering to both routine and emergency diagnostics. It also offers minimally invasive image-guided procedures, such as biopsies, drainages, and vascular interventions, enhancing patient outcomes with reduced recovery times. The department trains undergraduate MBBS students, postgraduate MD Radiodiagnosis residents, Diploma in Radiodiagnosis & Radiotherapy Technology (DRRT), integrating clinical exposure with academic rigor. Postgraduate teaching started in 1976. Currently the department trains 9 postgraduates per year. Radiology at GMCT plays a pivotal role in multidisciplinary case discussions, cancer board reviews, and trauma care, ensuring comprehensive patient management.

The department has equipments and facilities for Xray machine, CT scan, MRI scan, USG with colour doppler, mammography, DSA. The clinical services include, Barium upper GI and lower GI studies, HSG, Silography, urethrogram, fistulography, MCUG, Doppler studies, USG guided procedures, CT brain, head & neck, abdomen, CT enterography, urography, CT contrast enema, CT guided FNAC, Biopsy, MRI brain, spine, MR urography, MR cholangiopancreatography, mammography, angiography.

2. 3.15. Respiratory Medicine

The Chest disease Hospital (CDH) at Pulayanarkotta, inaugurated by the Hon'ble president of India in 1937, stands as a cornerstone of tertiary pulmonary care in the region. Since 1997, it has functioned as the operational base for the Department of Respiratory Medicine of the Government Medical College Hospital, Thiruvananthapuram, structured into three distinct units. The department manages a total of 211 beds at CDH, providing a full spectrum of inpatient and out-patient services. It includes a specialised ward for infectious, non-

infectious lung diseases, drug sensitive and drug-resistant TB cases, and a 10 bedded semi-ICU. Outpatient services are conducted three days weekly at CDH and three days at the main MCH campus. Staffed by a robust team of 10 faculty members, 3 Senior Residents, and 21 postgraduates and 2 super specialty DM residents, it combines high-level teaching with advanced comprehensive clinical care. Our centre also is the referral centre to RCC and SCTIMST for pulmonary diseases mainly Cancer related and lung diseases with neurological associations.

Nodal Centre for Drug-Resistant TB: The hospital also serves as the Nodal Centre for Drug-Resistant TB, with dedicated wards for both drug-sensitive and resistant TB cases. Its comprehensive service portfolio includes specialized clinics (SWAS airway disease clinics, Pulmonary Rehabilitation clinics on all days, and weekly ILD clinics on Thursday). It also has state of the art diagnostics (PFT, Lung Ultrasound and Ultrasound guided Lung Biopsies, Pigtail insertions and advanced diagnostic and therapeutic interventions such as Flexible and Portable Bronchoscopy, Rigid and Semirigid Thoracoscopy, Electrocautery, Argon Plasma Coagulation, Cryotherapy, Foreign body removal and Advanced lung cancer detection equipment like Radial and Linear EBUS. Advanced procedures are performed on Mondays. The department therefore serves as the tertiary care referral centre for the poor, the deserving, and the needy who come here with the hope of breathing comfortably.

2. 3. 16. Transfusion Medicine

The Department of Transfusion Medicine, GMC Thiruvananthapuram, functions as a state-level apex centre providing comprehensive 24×7 transfusion services. As the State Nodal Centre, it integrates automated immunohematology systems, ELISA/CLIA platforms, molecular genotyping, and real-time coagulation assessment. The department ensures safe and timely transfusion support across trauma care, obstetrics, paediatrics, haematology, oncology, liver transplantation, and bone marrow transplantation. It houses specialised units including the Molecular Lab, Therapeutic Unit, Quality Control Lab, and an extensive Rare Donor Registry. The department actively participates in Hemovigilance and EQUAS, maintains strict quality control processes, and follows National Plasma Policy guidelines. Academic achievements include consistent 100% MD pass rates, multiple KUHS ranks, national awards, and strong research output. Annual observances of donor day events,

outreach donation camps, and awareness programmes highlight its commitment to public engagement. The following facilities are available for 24x 7: Blood collection; component preparation & storage; issue of PRC, FFP, platelets, leukoreduced & apheresis components; emergency & elective transfusion support.

Nodal Centre for rare blood group registry: The Nodal Centre for rare blood group registry is functioning in the transfusion medicine department with the purpose of registering donors with rare blood groups, so that patients needing rare blood groups are connected with donors in medical emergencies.

2. 3. 17. Radiotherapy

GMCH Thiruvananthapuram has a well-established radiotherapy department providing advanced radiation therapy for cancer treatment, focusing on safe and effective care to improve patient outcomes and quality of life. Offers specialized care for cancer patients, including diagnosis, treatment, and supportive therapies, with a focus on personalized and compassionate oncology care. The department has advanced equipments including linear accelerators (LINAC) for precise cancer treatment

2. 4 Medical Super Specialty

2. 4. 1. Cardiology

The Department of Cardiology at Government Medical College, Thiruvananthapuram, established in 1972, is the first cardiology department in the public sector in Kerala. Since its inception, the department has been a pioneer in delivering advanced cardiac care, offering comprehensive outpatient, inpatient, and 24×7 consultation services for all major cardiac conditions. State-of-the-art diagnostic and interventional facilities—such as echocardiography, treadmill testing, Holter monitoring, coronary angiography, angioplasty, structural heart interventions, pacemaker and device implantation—have positioned the department as a leading centre for cardiovascular excellence in the state.

Over the decades, the department has consistently achieved several milestones, including Kerala's first coronary angioplasty (1998), first primary angioplasty (1999), first BMV (1999), and the first percutaneous ASD closure (2001) in government sector hospitals. It has also been at the forefront of electrophysiological procedures, 24-hour primary angioplasty

services, and most recently, advanced structural interventions such as TAVR (2023) and Trans-carotid TAVR (2024). In 2025, it became the first among Kerala Government Medical College Hospitals to implant a leadless pacemaker.

Academically, the department has played a crucial role in shaping cardiology training in Kerala, starting the DM Cardiology course in 1987, later expanding to eight seats, and conducting Kerala's first regular Cardiology CME program since 1991—now running uninterrupted for over 35 years. With continuous advancements in patient care, clinical training, and interventional cardiology, the department remains at the forefront of cardiovascular medicine in the region with the vision to grow into a centre of excellence.

2. 4. 2. Critical Care Medicine

The Department of Critical Care Medicine at GMC Thiruvananthapuram functions as a Multidisciplinary Intensive Care Unit (MDICU) providing comprehensive care to critically ill patients. It integrates the expertise of multiple clinical disciplines to deliver round-the-clock, protocol-based intensive care services. The department offers a wide range of services including advanced hemodynamic monitoring, invasive and non-invasive ventilation, renal replacement therapy, neurocritical care, infectious disease management, and emergency and trauma care. Critical care procedures such as central line insertion, airway management, tracheostomy, dialysis catheter placement, bronchoscopy, and thoracocentesis are routinely performed following established safety standards.

The MDICU is equipped with intensive care beds and isolation units designed for managing patients requiring high-acuity care. The multidisciplinary team comprises qualified intensivists, residents, trained nursing staff, and allied health professionals ensuring optimal nurse-to-patient ratios and comprehensive support services, including physiotherapy, anaesthesia technology, dialysis support, and biomedical maintenance. Each bed is integrated with state-of-the-art monitoring and life-support equipment, including high-end ventilators, multiparameter monitors with central surveillance, defibrillators, ultrasound, echocardiography, point-of-care testing systems, and end-tidal CO₂ monitoring. These facilities enable continuous real-time assessment and rapid clinical decision-making. The department maintains strict adherence to quality assurance protocols through regular

audits, morbidity and mortality reviews, and structured training programs aimed at enhancing staff competency and patient safety. Plans are underway to establish Extracorporeal Membrane Oxygenation (ECMO) services to further expand the department's advanced critical care capabilities. The department would play a major role in the critical care management of post-transplant patients and in infection prevention and control.

2. 4. 3. Endocrinology

The Division of Endocrinology at Government Medical College, Thiruvananthapuram was initiated by Dr. Mathew Roy which was later expanded into a full-fledged Department of Endocrinology in 2012. The first batch of DM Endocrinology trainees was admitted in 2017, with an annual intake of two students. The Department of Endocrinology conducts outpatient clinics on Mondays and Wednesdays in the Super Speciality Block. In addition, a dedicated Paediatric and Adolescent Endocrinology clinic is held on Saturdays of the Medical College OPD block. The department also runs a laboratory, where most endocrine investigations are performed under the supervision of the faculty of the Department of Endocrinology. Past and present DM trainees of the department have received multiple awards at national levels. The department is actively involved in various research projects and academic activities including ICMR projects.

Institute of Diabetes (IID): GMC Thiruvananthapuram conducts outreach programs through its Endocrinology Department to extend diabetes care beyond the hospital. These initiatives include awareness camps in schools and workplaces, free screening for early detection, and mobile clinics in rural areas. The programs also focus on adolescent health, addressing childhood obesity and juvenile diabetes. Training sessions for doctors and nurses strengthen community-level diabetes management. Overall, the outreach improves early detection, public awareness, and access to specialized endocrinology services across Kerala.

2. 4. 4 Medical Gastroenterology

The medical gastroenterology unit started in 1972, specialized in advanced diagnosis and treatment of digestive system disorders, offering expert care for diseases of liver, stomach, intestine and related gastrointestinal conditions. The Department of Medical Gastroenterology at Government Medical College Thiruvananthapuram is the birthplace,

backbone and benchmark of Gastroenterology in Kerala. The department was started on December 23, 1972, by Dr. V. Balakrishnan, recognized as a premier tertiary care referral centre and a distinguished academic hub in India. Formal super specialty training in Gastroenterology in Kerala began in 1980, marking a historic milestone in the academic evolution of the specialty in the state. The introduction of the DM Gastroenterology program started in 1980 with two seats later increased to six in 2010.

The department provides a comprehensive range of specialized services, including:

- Complex Disease Management: Expert care for gastrointestinal and hepatobiliary conditions
- Comprehensive Hepatology: Management of Cirrhosis, Portal Hypertension, ACLF, and Chronic Liver Disease.
- Metabolic & Inflammatory Care: MASLD evaluation and dedicated Inflammatory Bowel Disease (IBD) care with long-term follow-up, Advanced Endoscopy, GI Oncology, Transplant Support.

The department serves as a major advanced endoscopy centre, offering: Diagnostic Upper GI Endoscopy, Colonoscopy, Colonoscopic polypectomy, Endoscopic Retrograde Cholangiopancreatography (ERCP), Endoscopic Ultrasound (EUS), EUS-guided Fine Needle Aspiration / Biopsy, Variceal band ligation, Sclerotherapy, Achalasia dilatation, CRE balloon dilatation, Argon Plasma Coagulation, Oesophageal and Duodenal Stenting, Percutaneous Endoscopic Gastrostomy (PEG) Placement.

The department serves as one of the major hepatology centres in the state. The department also plays a vital supportive role in: Living Donor Liver Transplant Program, Pre-transplant optimization, post-transplant clinical support. Apart from DM in Medical Gastroenterology, Diploma in Endoscopy Technology also conducted. Last year total Inpatient Admissions were 1,945 and a total of 70,884 patients sought outpatient care from April 1, 2024, to March 31, 2025.

The department has a strong research ethos covering: Liver cirrhosis prognosis & ACLF outcomes, Portal hypertension and prognostic evaluation, MASLD disease burden and progression, Hepatocellular carcinoma outcomes and QoL, Inflammatory Bowel Disease and

intestinal ultrasound research, Elastography-based liver disease evaluation, Severe alcoholic hepatitis research, ICMR national pancreatitis epidemiology, International hepatology trials, The department actively publishes research, presents scientific work and contributes to, policy-shaping scientific knowledge.

Research Projects Done in Past 5 Years include: Cirrhosis prognosis & SBP mortality predictors, Portal vein thrombosis determinants, Frailty assessment in liver outcomes, MASLD spectrum and metabolic associations, Hepatocellular carcinoma survival determinants, TACE response outcome studies, Accuracy of intestinal ultrasound in IBD, Non-invasive portal hypertension risk tools, Severe alcoholic hepatitis, ICMR national pancreatitis project, International MASLD therapeutic trials.

Postgraduates of the Department have demonstrated exceptional academic excellence, winning multiple national and international recognitions.

2. 4. 5. Nephrology

The Department of Nephrology, Government Medical College Thiruvananthapuram started offering nephrology services as early as 1981. It is a major tertiary-care centre offering comprehensive renal care with outpatient clinics on Tuesday, Thursday and Friday, providing detailed evaluation and long-term management for both Acute Kidney Injury (AKI) and chronic kidney disease (CKD) patients. The department manages dedicated inpatient beds, delivers 24×7 nephrology consultation services across the hospital, and provides emergency care for AKI, CKD complications, dialysis emergencies, and post-transplant issues. It operates one of the largest government-run dialysis programs in Kerala with more than 33 haemodialysis machines offering maintenance HD, acute HD, SLED/SLED-f, Continuous Renal Replacement Therapy (CRRT), plasmapheresis, hemoperfusion, and ICU-based renal support. The department performs both live donor and deceased donor renal transplantation and provides specialized long-term follow-up through a dedicated Transplant OPD.

A wide range of procedures are performed including AV fistula creation, permcath insertion, AVF thrombolysis and salvage, CAPD catheter insertion, acute Peritoneal Dialysis catheter placement, temporary dialysis catheter placement, ultrasound-guided renal biopsy, and AVF

mapping. The department conducts the prestigious DM Nephrology program and also offers structured training for BSc Dialysis Technology (BSc DT) students as well as the DDT (Dialysis Technician Training) course, equipping trainees with hands-on skills in haemodialysis, acute dialysis, CRRT and dialysis unit management. Department organises CMEs in various fields of nephrology and organises various training sessions. With its high clinical volume, strong academic culture and commitment to equitable public health renal care, the Department of nephrology is aiming to establish Intervention nephrology, Paired kidney exchange Renal transplantation, dedicated Glomerular Disease clinic, Onconeurology and advanced Transplant immunology lab soon.

2. 4. 6. Neurology

The department of Neurology started in 2001. Currently 5 DM Neurology Senior Residents 15 junior residents, 12 Diploma in Neuro Technology students. are being trained by our department. The department has 16 bedded MICU, 14 bedded Stroke ICU, 1 VIP room 2 step down rooms, Neuro CT and Neuro Cath lab and 40 bedded ward. Monday, Thursday and Saturday are the OP days in a week. With 500-700 patient attendance. The department is fully organised for doing EEG, Sleep Study, Nerve Conduction Study, VEP, BERA and EMG. The department of neurology provides the following services

Stroke ICU- Stroke ICU is an essential component in acute stroke care which can very well reduce mortality and morbidity in patients. Setting up the stroke ICU was our dream because stroke ICU care could provide the best acute care for several stroke patients. Setting up a stroke ICU near ER could reduce the delay in IV thrombolysis and mechanical thrombectomy.

Stroke Cath Lab- One of the crucial components of our CSC is the Stroke Cath Lab. Establishing the Stroke Cath Lab in Government Medical College, Thiruvananthapuram became a milestone in the history of the health department of Kerala, being the first of its kind in the public sector in Kerala. Services including mechanical thrombectomy for acute ischemic stroke patients, carotid stenting for carotid artery stenosis, diagnostic DSA, and procedures for AVM and aneurysms are being provided to ordinary people through this Cath lab. Before establishing Cath lab in Government Medical College, Thiruvananthapuram these

procedures were done only in Sri Chitra Thirunal Institute of Medical Science and Research and in one private hospital in south Kerala, which the ordinary person cannot afford.

128 Slice CT Angiogram-128 slice CT angiogram has been functional since April 2021 and provides 24*7 CT and CT angiogram facility for acute stroke patients.

Comprehensive Stroke Centre (CSC), Department of Neurology, Government Medical College, Thiruvananthapuram is a dream project of the Government of Kerala which aims to provide state-of-the-art care to the common person suffering from acute stroke. Comprehensive Stroke centre- department of Neurology has four components: Stroke ICU, Stroke Cath, Lab, 128 slices CT angiogram, step-down rooms, and VIP room. CT angiogram has been functional since April 2021. For the smooth functioning of the Comprehensive Stroke Centre, there is a need for human resources for the full functioning of the stroke ICU, stroke Cath lab, step-down rooms and VIP room. Establishment of a Comprehensive Stroke Centre in Government Medical College, Thiruvananthapuram was an adroit step that revolutionized the care of patients with stroke, a disease associated with significant mortality and morbidity. The stroke centre was an exceptional contribution to the public interest and a felt need for tertiary neurology care. This step elevates Government Medical College, Thiruvananthapuram, to a centre of excellence. First Mechanical Thrombectomy done by Neurology Department in Government Sector Hospital. Conducting a SNIF Fellowship in Neuro-intervention Program to fulfil the human resource needs of the CSC, GMCT. In Neurology Department we are providing a 24*7 stroke Helpline service to the Public and there is a Helpline Number which is already circulated among the Public for communication.

2. 5. Surgical Super Specialties

2. 5. 1. Cardiovascular and thoracic surgery

The cardiovascular and thoracic surgery specializes in surgical treatment for heart, lung and chest conditions including complex heart bypasses, cardiac valve repairs and lung cancer surgery. The Department of Cardiothoracic and Vascular Surgery provides advanced surgical care to patients from southern Kerala and neighbouring regions.

It functions with a multidisciplinary team to manage complex cardiac, vascular and thoracic conditions. The department provides a wide spectrum of surgical services, including: Cardiac

Surgery, Open heart surgeries such as Coronary Artery Bypass Grafting (CABG), Valve repair and replacement, Off-pump bypass surgery (beating heart surgery), Redo surgeries, Paediatric cardiac surgery including neonatal and infant procedures, Thoracic surgery (Open, VATS); Aortic aneurysm repair; Thoracoscopic (minimally invasive) surgery; Vascular procedures (Central, Peripheral) The department is led by experienced cardiothoracic surgeons and supported by dedicated anaesthesiologists, perfusionists and specialized nursing staff.

2. 5. 2. Neurosurgery

The Department of Neurosurgery, Government Medical College, Thiruvananthapuram, was established in 1966 by the legendary Dr. Sambasivan. The history of neurosurgery at this institution is among the oldest in the state, as it was the first medical college in Kerala to establish a dedicated Department of Neurosurgery. In 1979, the first Neurosurgery postgraduate training programme in the state was initiated at Government Medical College, Trivandrum. Dr. Sanal Kumar was the first M. Ch. Neurosurgery trainee of the department. Initially, the programme offered two M. Ch. seats. In 2013, considering the increasing neurosurgical workload, the intake was expanded to six seats. To date, approximately 110 neurosurgeons have graduated from this institution and are serving in various parts of India and abroad. The Department of Neurosurgery is the largest referral centre for neurotrauma and complex neurosurgical cases in South Kerala and parts of southern Tamil Nadu.

The department provides high-quality neurosurgical care to all patients. The neurosurgical team possesses extensive expertise in neurotrauma, neurovascular surgery, neuro-oncology, advanced skull base surgery, complex spine procedures, and minimally invasive as well as endoscopic neurosurgery. The department is also supported by a specialised neurophysiotherapy and rehabilitation team. Outpatient services are available three days a week, on Tuesdays, Wednesdays, and Fridays. The department also provides 24-hour emergency neurosurgical services on all days. Inpatient wards are located in the Super Speciality Block, Old Hospital Block, and SAT Hospital, which caters exclusively to paediatric neurosurgery patients. The Super Speciality Block houses a six-bedded Intensive Care Unit and a four-bedded High Dependency Unit. The Multi-Speciality Block contains an 18-bedded Intensive

Care Unit dedicated to neurotrauma patients. All intensive care units are equipped with an adequate number of ventilators and advanced monitoring systems.

The department offers advanced care in neurotrauma, neurovascular surgery, skull base surgery, neuro-onco-surgery, complex spine surgery, minimally invasive and endoscopic neurosurgery, interventional neurology, and neurorehabilitation. The department is equipped with state-of-the-art neurosurgical infrastructure, including new-generation operating microscopes, high-speed surgical drills, advanced endoscopic systems, ultrasonic surgical aspirators, the latest neuro-navigation systems, sophisticated microsurgical instruments, ventilators, and neuromonitoring devices. These facilities significantly contribute to improved surgical precision and better clinical outcomes for neurosurgery patients.

2. 5. 3. Surgical Gastroenterology

The Department of Surgical Gastroenterology is a pioneering institution, established in 1975, the first department in India to focus exclusively on complex Gastroenterology care services for people of southern Kerala and some parts of Tamil Nadu. The department is offering M. Ch. courses and expert care utilizing both open and laparoscopic techniques and is known for training many leading surgeons in India. It provides comprehensive treatment for oesophageal, Gastrointestinal, hepato-pancreatico-biliary, colorectal, and other related diseases with state-of-the-art facilities.

2. 5. 4. Plastic surgery

The Department of Plastic Surgery at Government Medical College Thiruvananthapuram (GMCT) stands as a cornerstone of reconstructive and aesthetic surgical excellence in Kerala. Established in 1972 as a dedicated super specialty unit, the department has evolved into a premier centre for advanced plastic, reconstructive, and microsurgical interventions. It plays a pivotal role in managing complex trauma, congenital anomalies, burns, and post-oncologic reconstructions.

The department's legacy is rooted in its commitment to restoring form and function, with a strong emphasis on compassionate care and surgical precision. Over the decades, it has nurtured a generation of plastic surgeons through its M. Ch. program, contributing

significantly to the development of plastic surgery services across the state and beyond. The department specializes in craniofacial surgery, hand surgery, microsurgery, cleft lip and palate repair, and post-burn reconstruction. It serves as a regional referral centre for acute burn care and complex trauma requiring soft tissue coverage. While rooted in reconstructive surgery, the department also offers aesthetic procedures, balancing form with function. The department integrates clinical service with academic rigor, fostering a culture of continuous learning and surgical innovation.

The Burns Unit at Government Medical College, Thiruvananthapuram has recently become a major hub for advanced burn care in Kerala, especially with the establishment of the state's first skin bank in 2025. This facility is transforming treatment outcomes for patients with severe burn injuries. It has 7 bedded ICU with isolation rooms, 3 stepdown beds and burns OT. Government medical college, Trivandrum is selected as the centre of excellence under the government of India's programme on Prevention and Management of Trauma and Burn injuries.

2. 5. 5. Urology

The Urology Department was dedicated in 2011. This department has facilities for monopolar TURP- Trans Urethral Resection of Prostate, lithotripsy, retrograde intrarenal surgery, laparoscopic surgeries, pyeloplasty, trans urethral resection of bladder tumor, percutaneous nephrolithotomy, pyelolithotomy, testicular vein ligation, live donor and diseased donor renal transplant, urethroplasty and all other open surgeries.

The Department offers a 3-year full-time M. Ch. (Master of Chirurgiae) in Urology program, affiliated with the Kerala University of Health Sciences (KUHS) and approved by the National Medical Commission (NMC).

There is an increasing trend of patients seeking care from surgical super specialities more so in urology and neurosurgery compared to other departments

2. 5. 6. Nuclear medicine

The Department of Nuclear Medicine at GMC Thiruvananthapuram, plays a pivotal role in advanced diagnostic and therapeutic services, integrating cutting-edge technology with patient-centred care. Established as part of Kerala's premier medical institution in 1993. Dr.

P Ramachandran Nair was the first HOD. The department is equipped to handle a wide range of nuclear imaging and radionuclide therapies. It caters to both outpatient and inpatient services. The department supports clinical specialties by offering functional imaging techniques such as SPECT, and thyroid scans, which are crucial in oncology, cardiology, nephrology, and endocrinology. SPECT -CT scanner became operational in the Dept of Nuclear Medicine, Government Medical College Thiruvananthapuram from 16th December 2024.

The routinely performed scans are Tc99m MDP Bone scan, Tc99m Pertechnetate thyroid scan, Tc99m DTPA scan, Tc99m DMSA scan, Tc99m EC renogram, Tc99m MIBI Parathyroid imaging, Tc99m MIBI Myocardial Perfusion imaging, Scan for Meckel's diverticulum, Hepatobiliary Scintigraphy, GI bleed study, GE reflux study (milk scan) Lymphoscintigraphy and I-131 Whole body Radio- Iodine scans. Radioactive Iodine Treatments are also regularly done (Radioiodine (I-131) Ablation for thyroid cancer patients (Low dose therapy), Radioiodine (I-131) treatment for Hyperthyroidism is also performed with prior appointments).

2. 5. 7. Neonatology

The Department of Neonatology in GMC Thiruvananthapuram was created in 2015 (G. O(Rt)No. 3014/2015/H& FWD, dated Thiruvananthapuram, 17. 09. 2015). The Department has a 28 bedded Level 3 Inborn NICU, 14 bedded level 3 out born NICU, 10 bedded level 2 SNCU and 5 bedded triage area with 28 mother and baby beds. There are on an average 7000-8000 deliveries per year, the majority of which are high risk. The Department has acquired all state-of-the-art equipment including Incubators, High Frequency Ventilators, Inhaled nitric Oxide system, Laminar Flow for TPN preparation, and an EEG machine. There are regular bedside X-rays, blood gases analysis and point of care USS and Echocardiograms being performed.

There is a dedicated predischarge Screening area called "**Shalabam**" with separate trained staff. Comprehensive screening including Visual birth defect screening, Pulse oximetry screening for critical congenital heart disease, Universal Hearing Screening and Newborn Metabolic Screening is being done. The Paediatric Cardiology Department has started

performing neonatal cardiac procedures including Balloon Atrial Septostomy, PDA Stenting and PDA ligation. Detailed Genetic workup of sick neonates is being regularly done.

New developments include setting up of a new Mother and Newborn care unit and Comprehensive Lactation management centre (Human Milk Bank) with the help of NHM in 2025. New Procedures initiated in the department: - High frequency ventilation, inhaled nitric oxide therapy, LASER and intravitreal Anti VEGF injection for Retinopathy of prematurity. Management of babies with Neonatal cardiac interventional procedures and cardiothoracic surgery. Therapeutic Hypothermia for Hypoxic Ischemic encephalopathy.

2. 6. Paediatric Super Specialities

2. 6. 1. Paediatric Cardiology

The Department of Paediatric Cardiology, SAT Hospital was started as a division of the paediatrics department in 1998 by Dr Zulfrkar Ahmed with the vision of taking care of sick children with congenital heart diseases. It became an independent department by 2006. The department activities initially included outpatient, inpatient care, echocardiography, teaching and research. Regular teaching sessions were conducted for post graduate residents from the department of paediatrics and undergraduates. In 2017-2018, there was installation of state-of-the-art facilities like a dedicated paediatric cardiac catheterization laboratory and high-end echocardiography machines. The department caters to infants and children with heart diseases from all over Kerala and from the neighbouring districts of Tamil Nadu.

The department is one of the pioneer facilities in South India, started exclusively for treating infants, children and adolescents with congenital heart diseases and acquired heart diseases. A new modular paediatric cardiac surgery operation theatre and a 14 bedded post-operative ICU was commissioned in September 2021 under the National Health Mission. Paediatric Cardiology speciality OPD has witnessed a patient load close to 8000 patients in 2024. Echocardiograms, including foetal echocardiography are performed on a routine basis on the other days. More than 7000 echocardiograms were performed in 2024. Our vision is to grow into a centre of excellence in paediatric cardiac sciences offering top class interventional,

surgical and intensive medical care to all neonates and children with heart diseases in Kerala, free of cost.

2. 6. 2. Paediatric Nephrology

Paediatric Nephrology service was started in SAT Hospital as a small unit in 2007 which was later upgraded to a department in 2015. Currently, the department provides comprehensive care to children with kidney diseases. The department is running a state-of-the-art haemodialysis program for kidney failure both acute and chronic in kids starting from the age of 3 years. Smaller children and infants are maintained on CAPD. The department is running a haemodialysis program exclusively for children and adolescents. However, as there is no facility for kidney transplantation at SAT, the department is providing transplantation services in collaboration with the adult nephrology team, the vision is to establish a dedicated transplantation facility for children at SAT Hospital. Department started DM program for Paediatric Nephrology in 2024-25.

From 2018, the Department of Paediatric Nephrology has been involved in the International Society of Nephrology- Sister Renal Centre in collaboration with Cincinnati Children Hospital, Medical Centre, Ohio, USA one of the best Paediatric Nephrology Centres in the world. International collaboration with Cincinnati children's hospital started in 2018 at Level B was upgraded to level A International Society of Nephrology.

2. 6. 3. Paediatric Neurology

The Paediatric Neurology department began in 1983, when it began a twice a week OP service with around 10 to 12 cases in a day. This OP has grown to 17, 901 patients in a year. In 1985, an EEG machine and EMG machine were procured for the department. In 1987, the division of Paediatric Neurology was created. In 1997, a professor post was created for the division of Paediatric Neurology. Administrative sanction was given for the department in 2005. Special rules for Paediatric Neurology were formed in 2008. The vision is to have a tertiary care facility for paediatric Neurology in the state.

2. 6. 4. Paediatric Surgery

The Department of Paediatric Surgery is located at SAT Hospital which was gifted to the children of Kerala by the Royal family of Travancore in memory of their late heir to the

throne-Sree Avittam Thirunal Rama Varma who succumbed to an undiagnosed cardiac illness in childhood. The hospital started functioning in 1950 with 80 beds exclusively for children. A maternity unit was added to the Paediatric Unit in 1952, and this hospital became the Mother and Child Care Institute and part of Medical College, Thiruvananthapuram. Paediatric surgical problems were managed by the Department of General Surgery under Dr. Jacob Taliat in 1954. The first ever Paediatric Surgery unit in India was established in 1954, Dr R Raman Nair was appointed as tutor in Paediatric Surgery. He completed his MS General Surgery in 1956 and took charge of the department which had become independent by then. In 1955 after training in USA, Dr Raman Nair was promoted to the post of Head of Dept of Paediatric Surgery. He developed the unit as an independent department with help of UNICEF in 1956.

The Paediatric Surgery Department provides the highest quality of surgical care to children, focusing on diagnosing and treating a wide range of surgical conditions in newborns, infants, and adolescents. The team includes highly trained paediatric surgeons, nurses specialized in paediatric care, and anaesthesia providers, all dedicated to the unique needs of young patients; in treating a wide range of conditions, from common childhood ailments to complex congenital or acquired disorders. Provides surgical care for infants and children, addressing congenital anomalies, injuries and childhood diseases with advanced techniques and compassionate care.

2. 6. 5. Reproductive Medicine

The Department of Reproductive Medicine at SAT Hospital, addresses infertility, assisted reproductive technology (ART), puberty, menopause, reproductive system diseases, sexual dysfunction, genetics, endocrinology, early pregnancy, and fertility-enhancing surgeries. This subspecialty emerged due to gaps in postgraduate curricula and limited ART availability in public teaching hospitals, leading the National Medical Commission to recognize MCh in Reproductive Medicine and Surgery.

The unit launched in 2010, became operational in 2012, and delivered South India's first public sector IVF-ICSI babies in 2013 at one-third private sector costs. Milestones include the first IVF for an ovarian cancer survivor in 2016, M. Ch program start in 2019 (first in

government sector South India outside AIIMS), registration as a Level II ART clinic in 2023, and over 500 IVF babies by 2025, plus oocyte cryopreservation for cancer patients. Facilities and Services include the third-floor hosts outpatient services with ultrasound, counselling, library, and lecture hall; the second-floor features IVF areas, embryology lab, andrology lab, IUI room, and endoscopy theatre with recovery and 20-bed ward. Equipment includes high-end ultrasounds, CO2 incubators, micromanipulators, laser hatching, vitrification systems, and four cryocans (one for cancer patient semen preservation). Services cover basic infertility workup (OP, ultrasound, semen analysis, IUI, medical management), advanced ART (IVF, ICSI, surgical sperm retrieval, embryo/oocyte freezing, blastocyst transfer), and fertility-enhancing surgeries (hysteroscopy, laparoscopy for myomectomy, adhesiolysis).

2. 6. 6. Foetal Medicine

The Foetal Medicine Department at Sree Avittam Thirunal (SAT) Hospital, Thiruvananthapuram, is a landmark addition to Kerala's public healthcare. Launched officially as a dedicated department in late 2024 (building on the earlier "SRADHA" project). Led by Dr. Pio James, a specialist in Maternal-Foetal Medicine, this unit is designed to provide advanced, high-precision care for unborn babies, making it the second government facility in India (after AIIMS Delhi) to offer such comprehensive services for free. The unit serves as an apex referral centre for high-risk pregnancies across Kerala and neighbouring districts.

Its services are categorized into screening, diagnostics, and advanced interventions:

1. Routine & Specialized Scans Nuchal Translucency (NT) Scan (11–14 Weeks), detailed Anomaly/Morphology Scan (18–22 Weeks), Foetal Echocardiogram, Growth & Wellbeing Scans
2. Advanced Diagnostic Procedures- NIPT (Non-Invasive Prenatal Testing), CVS (Chorionic Villus Sampling), Amniocentesis.

2. 6. 7. Medical Genetics

The Genetic clinic started in 2007 at the Department of Paediatrics, where Diagnosis of Genetic disorders and counselling to the affected families was given. Proposal for a cytogenetic and molecular lab submitted through CDC, and with the funding support from NABARD, laboratory in CDC started in 2012. This lab got accredited by NABL in 2023 and

presently completed more than 5000 karyotype and basic molecular tests. ICMR multicentric study on Lysosomal Storage Disorders was completed in 2017 With genetic clinic and laboratory facility Government of India recognised our medical college as centre of excellence for rare disease, in 2022 December. Considering the facilities and services, the Government of Kerala announced the Department of Medical Genetics in 2023, the first of its kind in any state medical college in India. The Department of Medical Genetics started functioning from June 2024 and one more faculty joined in 2025.

The ICMR registry for rare and inherited metabolic disorders started in 2024. NIDAN Kendra, DBT project for Diagnosis of genetic disorders also started in 2024. Presently Department of Medical Genetics having clinical work on all days. With cytogenetic/ molecular facility, prenatal diagnostic services through foetal medicine department, management of rare diseases, genetic counselling. Presently the number of staff in the department is 20 which includes 3 faculty and 17 project staff. We are having few multicentric projects and clinical trials. Planning to start a DM programme in medical Genetics in 2026.

2. 6. 8. Medical Oncology

The department started functioning in 2020 with Dr. Harish S as the Medical Oncologist. This department plays a pivotal role in Cancer care offering services with a focus on chemotherapy and systemic cancer treatment. It provides comprehensive care for patients with various malignancies primarily focussing on chemotherapy targeted therapy and supportive Oncology care.

2. 7. Supportive systems

2. 7. 1. National TB Elimination Program Services

Government Medical College, Thiruvananthapuram plays a key role in the National TB Elimination Program (NTEP) by providing advanced diagnostics, treatment initiation, and seamless referral services. A dedicated NTEP Cell, supported by nodal officers and Nikshay Mitras, ensures coordination, patient support, and management of both drug-sensitive and drug-resistant TB. Through counselling, nutritional care, follow-up, training, and inter-departmental collaboration, the institution strengthens Kerala's and India's mission to eliminate tuberculosis while improving treatment outcomes and public health awareness.

2. 7. 2. State Prevention of Infectious and Epidemic Disease (SPEID) Cell

The State PEID Cell functions under the control of the Principal, Govt. Medical College, Thiruvananthapuram, with state-wide jurisdiction. The Professor and Head of the department of community medicine is the coordinator and in-charge of the State PEID Cell. At present, there are 12 Regional PEID Cells attached to the Community Medicine Departments of Government Medical Colleges. The Regional PEID Cell at Medical College, Thiruvananthapuram, is merged with the State PEID Cell as per Government orders. The State PEID coordinates the prevention, control, and surveillance activities of communicable diseases, awareness programs, training programs, health education activities, infection control activities, waste management activities, including biogas plant and incinerator, and clean campus campaign programs of Govt. Medical College, Thiruvananthapuram.

2. 7. 3. Kerala State Organ and Tissue Transplant Organization (K-SOTTO)

K-SOTTO functions as the nodal agency for organ and tissue donation in Kerala, with Government Medical College, Thiruvananthapuram serving as a key transplant centre under its network.

K-SOTTO was established by the Government of Kerala as a charitable society under the Travancore-Kochi Literary, Scientific and Charitable Societies Act, 1955. It enforces the Transplantation of Human Organs and Tissues Act, 1994, ensuring ethical and regulated organ donation and transplantation across the state. Government Medical College, Thiruvananthapuram (MCH) is one of the primary hospitals linked to K-SOTTO, handling organ retrieval and transplantation procedures.

Functions at GMC Trivandrum includes Identification of donors: Coordinates with hospital staff to identify potential deceased donors, Organ retrieval & allocation: Ensures equitable distribution of organs to recipients based on medical urgency and compatibility, Transplant procedures: Facilitates kidney, liver, and other organ transplants at GMC, Training & awareness: Conducts programs for medical professionals and public campaigns to promote organ donation.

Future Directions

- Boost cadaveric donations: Strengthen ICU protocols and family counselling to increase deceased donor identification.
- Expand transplant programs: Beyond kidneys, GMC Trivandrum aims to scale up liver and corneal transplants.
- Public trust: Transparency in allocation and awareness campaigns under K-SOTTO can improve donor participation.

While K-SOTTO plays a crucial role in Kerala’s transplant network, scaling up deceased donor programs remains the biggest priority.

2. 8. Health units

2. 8.1. The Rural Health Training Centre, Vakkom,

The training centre was established in 1958 and upgraded to a Rural Health Training Centre in 2004, serves as a key community healthcare facility under Thiruvananthapuram Medical College. It provides OP, IP, laboratory, pharmacy, and palliative care services to over 19, 000 residents across 14 wards, while also functioning as a training site for around 250 medical students annually. With support from local panchayats, the State Health Department, and NHM, the centre delivers comprehensive primary healthcare—including preventive, promotive, curative, rehabilitative, and palliative services—alongside specialized clinics in paediatrics, gynaecology, and mental health.



Figure 11 Rural Health training Centre (RHTC), Vakkom

2. 8. 2. Integrated Family Health Centre (IFHC), Pangappara

The Medical College Health Unit (IFHC) at Pangappara, established in 1953 and functioning under Government Medical College Thiruvananthapuram, is India’s first Primary Health Training Centre linked to a medical college. It delivers comprehensive healthcare—including OP, IP, lab, pharmacy, and palliative services—to nearly 150, 000 residents, while also serving as a major training hub for house surgeons, postgraduates, MBBS, BDS, nursing, and paramedical students. Upgraded under the Aardram Mission with extended service hours and specialist OP clinics, the centre now provides care to 650 palliative patients and is being developed into a Centre of Excellence in Primary Health Care, supported by coordinated efforts of the State Health Department, Thiruvananthapuram Corporation, and NHM.

2.9 Academic Program

2. 9. 1. Undergraduate Courses

Government Medical College, Thiruvananthapuram is a comprehensive academic centre, offering a full spectrum of medical education from undergraduate to super-specialty levels, supported by extensive clinical infrastructure. Availability of seats as follows

Annual UG Intake (MBBS)	: 250
Annual PG Intake (MD/MS)	: 248

Super Specialty Seats	: 58
Pharmacy/paramedical (UG)	: 146
Pharmacy/paramedical (PG)	: 54
Diploma	: 255

All courses are affiliated to Kerala University of Health Sciences and recognised by the National Medical Commission.

The premier undergraduate program offered is the MBBS degree with an annual intake of 250 students. Along with MBBS course, the following courses in paramedical sciences also conducted at this college namely BCVT, BSc Optometry, BSc MLT, BSc Perfusion Technology, B Pharm, B Pharm (LE), BSc Dialysis Technology (Annexure 1).

2. 9. 2. Speciality Postgraduate Courses

GMCT offers a wide range of postgraduate degree (MD/MS) and diploma courses across 24 specialties, with a total of 248 seats in medical specialties. Post graduate degree courses are conducted in MD Anatomy, MD Anaesthesiology, MD Biochemistry, MD Dermatology, MS ENT, MD Forensic Medicine, MD General Medicine, MS General Surgery, MD Microbiology, MS O&G, MS Ophthalmology, MS Orthopaedics, MD Community Medicine, MD Paediatrics, MD Pathology, MD Pharmacology, MD Physiology, MD Physical Medicine & R, MD Psychiatry, MD Radio diagnosis, MD Radio Therapy, MD Transfusion Medicine, Rehabilitation, MD Pulmonary Medicine, MD Emergency Medicine. M Pharm in Para medical discipline MSc Medical laboratory Technology (Annexure 1).

2. 9. 3. Super Speciality Postgraduate Courses

The institution offers advanced medical training in 14 super-specialty disciplines (DM/MCh) with 58 seats, including DM Neurology, DM Gastroenterology, DM Nephrology, MCh Neuro Surgery, MCh Paediatric Surgery, MCh Surgical Gastroenterology, MCh Plastic Surgery, MCh Cardio Vascular & Thoracic Surgery, MCh Genito Urinary Surgery, MCh Reproductive Surgery & Medicine, DM Endocrinology, DM Paediatric Neurology, DM Neonatology (Annexure 1).

2. 9. 4. Undergraduate Diploma courses

Along with undergraduate and post graduate degree courses, the institute is conducting diploma courses Diploma in Central Sterile Supply Department Technology (DCSST), Diploma in Radiodiagnosis and Radiotherapy Technology (DRRT), D. Pharm, Diploma in MLT, Diploma in Ophthalmic Assistant (DOA) course, Diploma in Dialysis Technology (DDT), Diploma in Operation Theatre and Anesthesia Technology (DOTAT), Diploma in Endoscopy Technology (DET), Diploma in Dental Mechanic Course (DMC) and Diploma in Neuro Technology (DNT). A total of 255 seats under various diploma courses are available (Annexure 1).

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CHAPTER- 3

FACT SHEET OF HEALTH FACILITIES AND SERVICES

3. 1 Overview of Facilities

The clinical services are delivered through a network of facilities:

Table: 2 Overview of Health facilities

Medical College Hospital	A1952-bed hospital with all basic and major specialties
Sree Avittam Thirunal Hospital	A dedicated 1157-bed women and children's hospital, also hosting the state's only government-sector Reproductive Medicine department with ART/IVF facilities
Super Specialty Block	Houses six super-specialties
Multi-Specialty Block	Accommodates CVTS, Cardiology, Multi-Disciplinary ICU, Trauma Care ICU, and Geriatrics
Regional Institute of Ophthalmology	An off-campus institute for eye care with 250 beds and facilities for advanced eye care
Institute of Chest Disease Pulayanarkotta	An off-campus institute for department of respiratory diseases having 110 beds
Urban Health Training Centre, Pangappara	Urban training institute attached to Medical College to train students on implementation of primary health care
Rural Health Training Centre, Pangappara	Training institute attached to Medical College to train students on implementation of primary health care

Table 3. Bed strength available in GMC Thiruvananthapuram

Institution	Total Beds	General Beds	ICU Beds	Casualty Beds	Super Speciality Beds	OT Tables
Medical College Hospital	1952	1307	251	103	291	36
Sree Thirunal (SAT) Avittam Hospital	1157	1004	100	10	153	10
Regional Institute of Ophthalmology (RIO)	250	249	Nil	1	Nil	9
Institute of Chest Disease, Pulayanarkotta	110	102	4	4	Nil	0
Urban Health Training Centre, Pangappara	8	8	Nil	Nil	Nil	Nil
Rural Health Training Centre, Vakkom	30	30	Nil	Nil	Nil	Nil

3.2. Speciality Clinics

The institution hosts an extensive and diverse network of specialty clinics that deliver comprehensive care across nearly every major branch of medicine. These clinics collectively ensure that patients receive focused, expert-driven evaluation and management tailored to their specific medical needs.

3.2.1. Speciality Clinics in Medical College Hospital

1) Cardiology	Monday to Saturday
2) General Medicine	Monday to Saturday
3) Infectious Disease	Monday to Saturday
4) Dermatology & venerology	Monday to Saturday
5) General Surgery	Monday to Saturday
6) Orthopaedics	Monday to Saturday
7) ENT	Monday to Saturday
8) Psychiatry	Monday to Saturday
9) Deaddiction Clinic (Psychiatry)	Monday to Saturday
10) Physical Medicine and Rehabilitation	Monday to Saturday
11) Preventive Clinic (Community Medicine)	Monday to Saturday
12) Radiation Oncology (Radiotherapy)	Monday to Saturday
13) Local OP (Community Medicine)	Monday to Saturday
14) Pain Clinic	Monday to Saturday
15) Pre-Anaesthetic Clinic	Monday to Saturday
16) Palliative Clinic	Monday to Saturday
17) NTEP Clinic	Monday to Saturday
18) NTEP LAB	Monday to Saturday
19) ART Plus Centre	Monday to Saturday
20) Jyothis Lab (ICTC)	Monday to Saturday
21) Urology clinic	Monday to Saturday
22) Plastic Surgery	Monday, Tuesday, Thursday, Friday
23) CTEV Clinic (Orthopaedics)	Monday, Wednesday, Saturday

24) Respiratory Medicine	Tuesday, Friday, Saturday
25) Cardiovascular Thoracic Surgery	Monday, Wednesday, Thursday
26) Medical Neurology	Monday, Thursday, Saturday
27) Neurosurgery	Tuesday, Wednesday, Friday
28) Head Injury Clinic (NS)	Tuesday, Wednesday, Friday
29) Nephrology	Tuesday, Thursday, Friday
30) Nuclear Medicine OP & Thyroid clinic	Tuesday, Wednesday
31) Haematology (General Medicine)	Monday, Thursday
32) Medical Gastroenterology	Wednesday, Saturday
33) Surgical Gastroenterology	Tuesday, Friday
34) Endocrinology	Monday, Wednesday
35) Spine Clinic (Orthopaedics)	Friday
36) Rheumatology (General Medicine)	Tuesday
37) Valve Clinic (CTVS)	Saturday
38) Suicide Prevention Clinic (Psychiatry)	Tuesday
39) Holistic & Psychosomatic Clinic (Psychiatry)	Thursday
40) Psycho Geriatric Clinic (Psychiatry)	Friday
41) Child and Adolescent Psychiatry Clinic	Saturday
42) Sports Clinic (PMR)	Monday
43) Nuclear Medicine	Tuesday
44) Spine Speciality Clinic (NS)	Thursday
45) Fatty Liver Clinic (Medical Gastro)	Monday
46) Hepatology & General Gastroenterology Clinic	Wednesday
47) IBD Clinic	Saturday

48) Cerebral Palsy Clinic (PMR) All Monday except 5th Monday

3.2.2. Speciality Clinics in SAT Hospital

49) Obstetrics & Gynaecology	Monday to Saturday
50) Paediatrics	Monday to Saturday
51) Paediatric Surgery	Monday to Saturday
52) Newborn clinic	Monday to Saturday
53) Behavioural Paediatrics	Monday to Saturday, Except Friday
54) Paediatric Gastroenterology	Monday, Thursday
55) Paediatric Urology	Thursday, Friday, Saturday
56) Paediatric Diabetic Clinic	Monday
57) Paediatric Gastro Clinic	Monday
58) Paediatric Neurology	Monday
59) Paediatric Cardiology	Tuesday
60) Genetic Clinic (Paediatric)	Tuesday
61) Out-Born Neonatal Clinic (Paediatric)	Tuesday
62) Haemophilia Clinic (Paediatric)	Tuesday
63) Paediatric Nephrology	Wednesday
64) Asthma clinic(paediatric)	Wednesday
65) Pain & Palliative Clinic (Paediatrics)	Thursday
66) Gastroenterology (Paediatrics)	Thursday
67) Neurology (Paediatrics)	Thursday
68) Nephrology (Paediatrics)	Friday
69) In-Born Neonatal Clinic (Paediatric)	Tuesday
70) Nutrition Clinic (Paediatrics)	Friday

71) Rheumatic Clinic (Paediatrics)	Friday
72) Endocrine Clinic (Paediatrics)	Friday
73) Cardiology (Paediatrics)	Saturday
74) Urology (Paediatrics)	Saturday
75) ART Clinic (Paediatrics)	Saturday
76) Haemophilia Clinic (Paediatrics)	Saturday
77) SMA Clinic	First Tuesday

3.2.3 Speciality Clinics in Regional Institute of Ophthalmology (RIO)

78) Ophthalmology	Monday to Saturday
79) Low Vision Clinic	Monday to Saturday
80) Squint Clinic	Monday to Saturday
81) Cornea Clinic	Monday to Saturday
82) Glaucoma clinic	Monday to Saturday
83) Retina Clinic	Monday to Saturday

3.2.4. OP/IP Details during last 10 years

Table 4 Outpatient and In Patient count in Government Medical College Hospital

Year	Outpatient (OP)	Inpatient (IP)
2016	11, 21, 218	82, 584
2017	11, 66, 134	90, 341
2018	12, 44, 083	93, 124
2019	12, 77, 049	78, 767
2020	7, 23, 234	63, 892
2021	8, 72, 824	97, 943

2022	11, 70, 015	95, 087
2023	13, 00, 001	98, 820
2024	13, 24, 770	97, 313

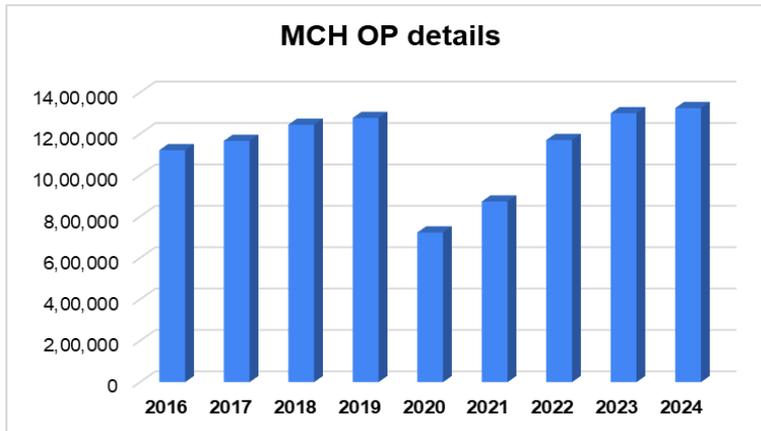


Figure 12. OP details in Medical College Hospital, Government Medical College

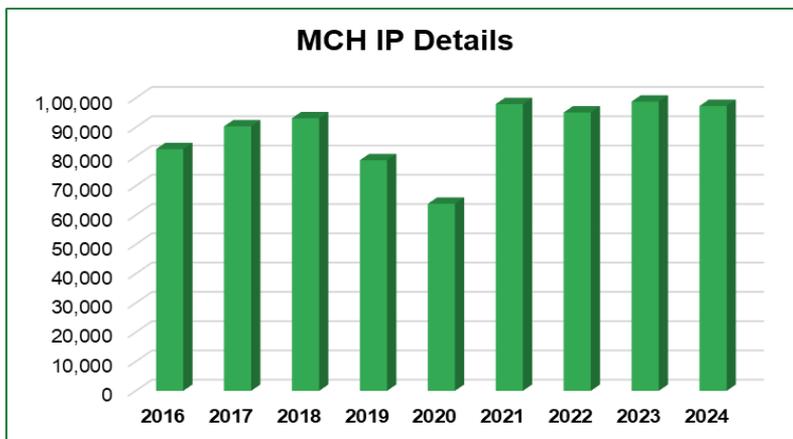


Figure 13. OP details in Medical College Hospital, Government Medical College

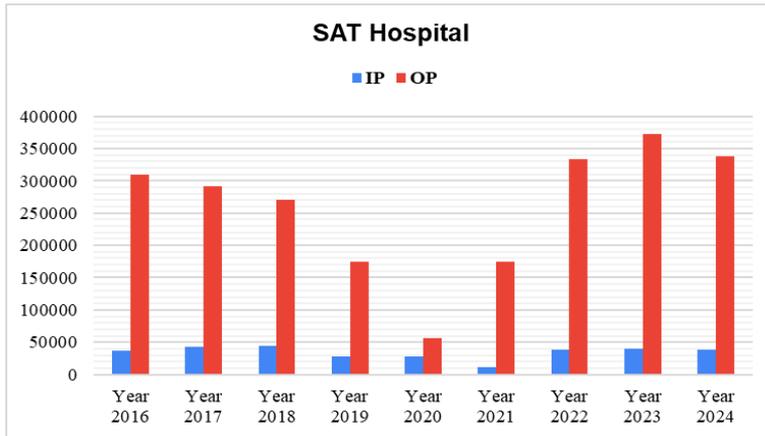


Figure 14. OP & IP in, SAT Hospital, Government Medical College, Thiruvananthapuram

Both OP and IP case load is gradually increasing after the Covid pandemic period compared to pre covid period. Strengthening of secondary level institutions and adherence to reference protocol will regulate patient inflow to SAT hospital

Table 5 Total OP/IP Details - Regional Institute of Ophthalmology

Year	OP	IP
2016	161,801	8,595
2017	183,188	7,458
2018	222,345	7,931
2019	253,776	7,606
2020	120,552	2,752
2021	149,080	3,772
2022	194,239	5,040
2023	201,099	5,077
2024	194,963	4,979

Ophthalmology reported a fall inpatient attend to OP during the post COVID period

3.3. Work details of Departments (based on e-health data)

3.3.1. Outpatient services in Medical Specialities in MCH

Table 6 OP statistics in Medical Specialities in MCH Thiruvananthapuram

Department	Year 2021	Year 2022	Year 2023	Year 2024
General Medicine	39347	47217	54592	54222
Dermatology & Venerology	31193	46878	57483	58703
Psychiatry	23225	32132	45642	41471
Infectious Disease	2181	2902	2759	3828
Local OP	5156	9802	14964	15338

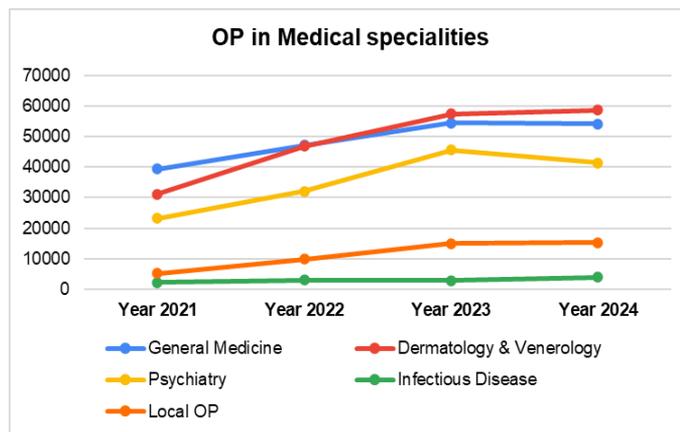


Figure 15. OP statistics in Medical Specialities in MCH

Outpatient patient load increased in all medical specialities except infectious diseases may be due to the fact that, being a tertiary care referral hospital, infectious diseases are generally being referred and subsequently registered in the General Medicine Department, and treatment decisions are made in consultation with the Infectious Disease department. (Detailed list has been added as **Annexure 2**)

3.3.2. OP attendance in Surgical Specialities

Table 7. OP statistics in Surgical Specialities in MCH

Surgical Specialities	Year 2021	Year 2022	Year 2023	Year 2024
General Surgery	49170	69159	69568	69374
Orthopaedics	73472	97612	102346	105450
ENT	32246	53411	70738	70306
Anaesthesia	10563	29760	29873	35516

Outpatient case load in orthopaedics, ENT cases showing an increasing trend and surgery case load also showing an increasing trend, the same trend is not seen in surgery case load. Strict implementation of referral protocol and strengthening of secondary care level institutions along with trauma and accident mitigation interventions will bring down OP case load in Medical College.

3.3.3 Caseload in Emergency Medicine

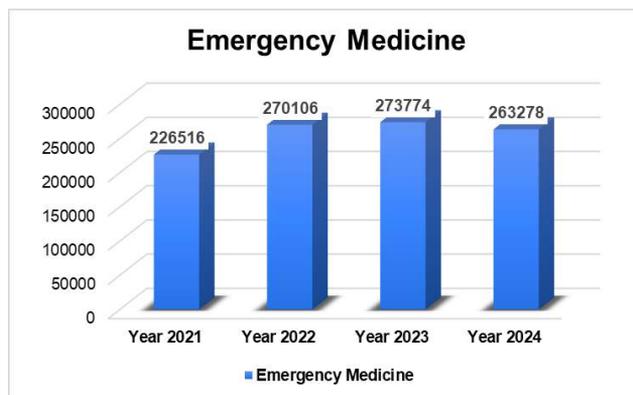


Figure 16. OP statistics in Emergency Medicine in MCH

Outpatient load in the emergency medicine department has remained static over the last three years. Strengthening of primary and secondary care institutions and primary level interventions in control of accidents and injuries, lifestyle diseases etc and availability of emergency services in private sector also influence the patient load in MCH.

3.3.4. OP attendance in Medical super specialities

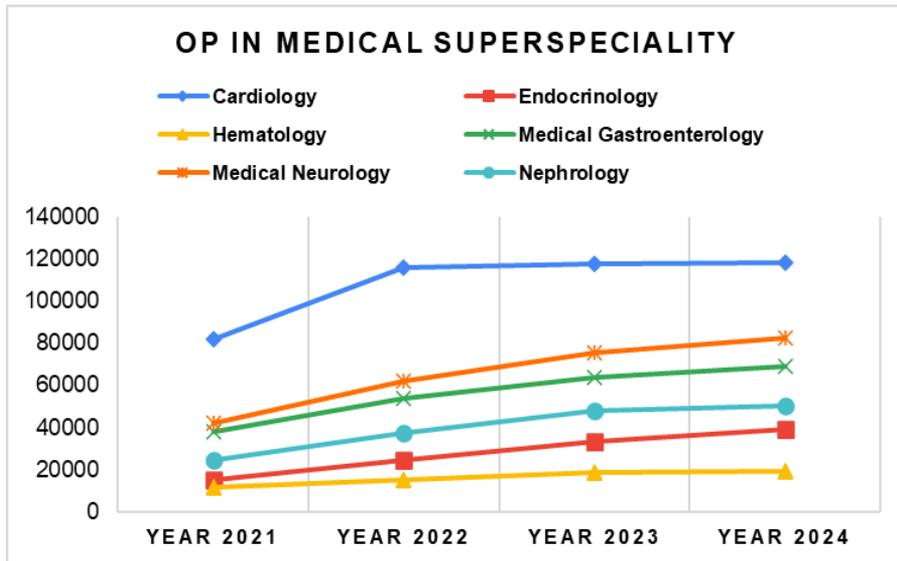


Figure 17. OP statistics in Medical Super Specialities in MCH

Patients reported to super speciality departments of the medical stream are showing an increasing trend over the past 4years. Being a tertiary care referral centre strengthening of super speciality departments in terms of manpower, facilities and infrastructure needing to cater to increasing case load needing specialized care in the coming years

3.3.5. OP attendance in Surgical super specialities

Table 8. OP statistics in Surgical Super Specialities in MCH

Department	Year 2021	Year 2022	Year 2023	Year 2024
Urology	36753	51888	53782	56747
Surgical Gastroenterology	5108	6854	7674	8284
Neurosurgery	12540	19303	22792	25831
Plastic Surgery	7745	12331	12891	13383
Cardiothoracic Surgery	5540	8890	9971	9628

Maximum cases reported to the urology department have too increased over the years. Kerala being a state with high prevalence of Type 2 diabetes mellitus, long duration of poor diabetes control will predispose the person to develop end organ damage, which necessitate the need for specialized care from Urology and nephrology and more people approach medical colleges leading to increased OP attendance. MCH data indicates an increasing trend of OP attendance both in Nephrology and Urology. Strengthening of secondary care centres and escalation of provisions in the tertiary care centres are needed to cater to increasing case load.

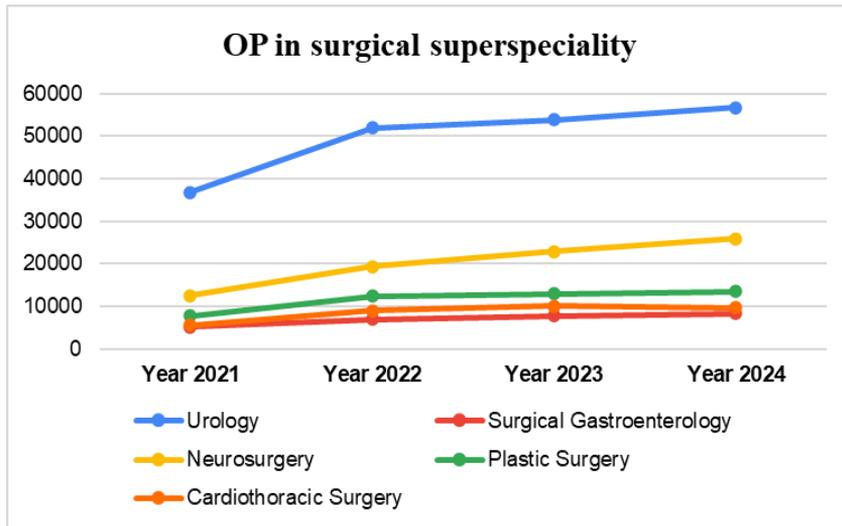


Figure 18. OP statistics in Surgical Super Specialities in MCH

There is an increasing trend of patients seeking care from surgical super specialities more so in urology and neurosurgery compared to other departments

3. 3. 6. Outpatient details of Medicine allied specialities in MCH

Table 9. Outpatient details of Medicine allied specialities in MCH

Department	Year 2021	Year 2022	Year 2023	Year 2024
Preventive Clinic	5623	9593	10206	12102

Radiotherapy	27888	32375	29994	28079
Respiratory Medicine	16749	24693	26904	25560
Rheumatology	8513	11268	14958	16644
PMR	13398	19811	23141	25665

Attendance in Preventive clinic, Rheumatology and PMR are showing an increasing trend indication provision of specialized service at secondary care institutions. Radiotherapy attendance decreased over the years, may be due to the availability of service in RCC. The institute has respiratory medicine both in Medical College hospital and Institute of chest disease, this includes data from MCH alone.

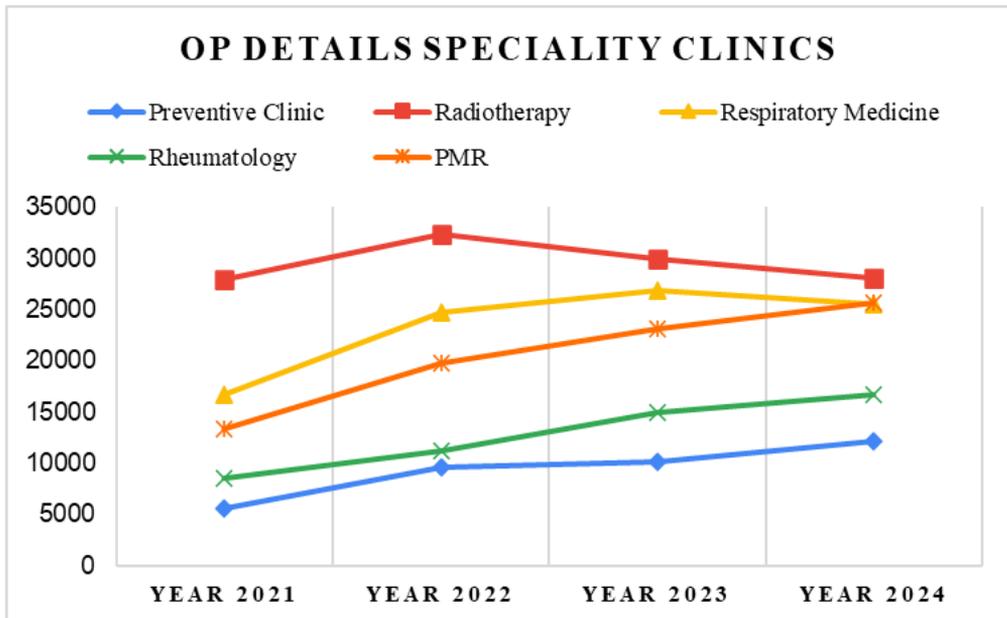


Figure 19. Outpatient details of Medicine allied specialities in MCH

3. 4. Outpatient statistics in SAT Hospital

3. 4.1 General OP in SAT

Paediatrics OP, both general and emergency casualty attendance has showed an increasing trend

Table 10. Outpatient statistics in SAT

Clinic	Year 2021	Year 2022	Year 2023
Obstetrics clinic	55584	59321	58696
Gynaecology clinic	37737	53270	49804
Paediatrics OP	35260	50084	54231
Paediatrics Casualty	56438	69720	79963

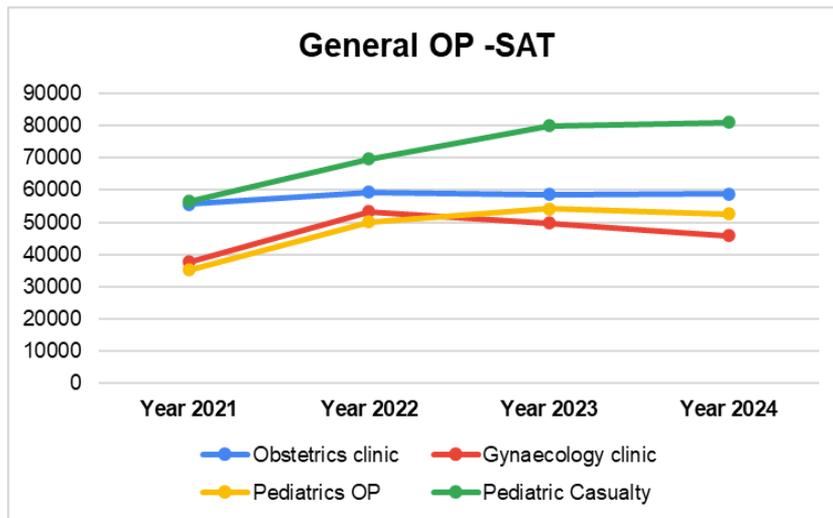


Figure 20. Outpatient Statistics in SAT

There is an increasing trend of paediatric cases attending casualty in SAT, paediatric OP attendance also showing an increasing trend. Obstetrics and Gynaecology attendance has not increased over the last 4 years. Strengthening of primary and secondary level Institutions providing quality care will help in reducing inflow of patients to referral centres

3. 4. 2. Speciality OP in Paediatrics

Table 11. OP statistics of speciality clinics in Paediatrics

Clinic	Year 2021	Year 2022	Year 2023	Year 2024
Paediatric Cardiology	3441	5800	6713	6623
Behavioral Paediatrics	2872	5041	7347	9232
Paediatric Surgery	5171	6945	7694	7637
Paediatric Nephrology	2887	4467	5321	5500
Paediatric Gastroenterology	1360	1970	2559	2606
Paediatric Endocrinology	949	1360	2390	2591
Paediatric Genetics	1179	1971	1894	1373
Paediatric Neurology	1777	1786	1765	2470
Paediatric Respiratory	552	692	1670	1643

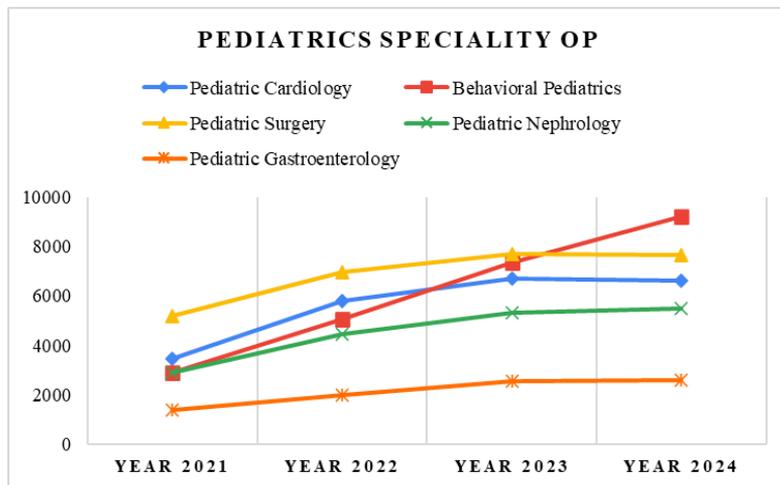


Figure 21. OP statistics of speciality clinics in Paediatrics

Behavioral Paediatric OP attendance is showing an upward trend indicating the need for establishing such services in the secondary level institutions.

Outpatients to Paediatrics endocrinology department is showing a sharp upward trend over the last 4 years, strengthening of this department is needed to cater to increasing case load in future. Centre of excellence for rare diseases linked to the department of genetics showing a decreasing trend of OP attendance.

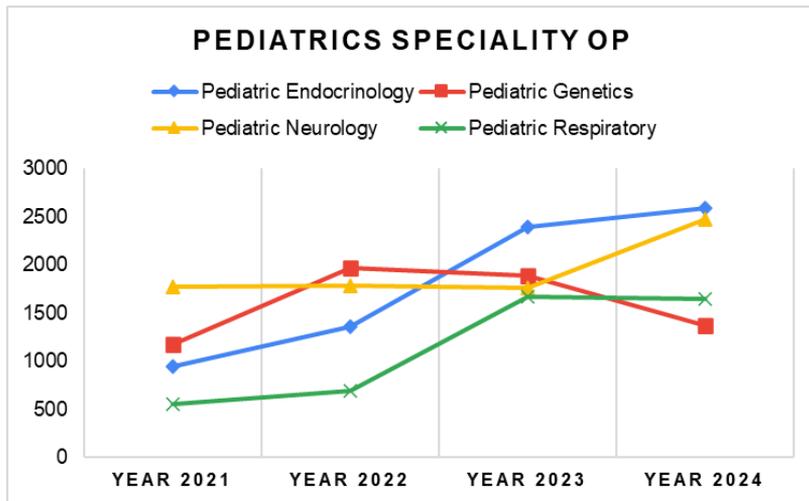


Figure 22. Paediatric Specialty OP in SAT

Details of OP statistics of SAT hospital are included in **Annexure 2**

3. 5. Outpatient statistics of Regional Institute of Ophthalmology

Total outpatient attendance remains status during the last 3 years, one further analysis, the same trend was seen in local OP and referral Op cases, but cases attending casualty peaked in 2022 and then declined in 2023 and the same trend was continued in 2024.

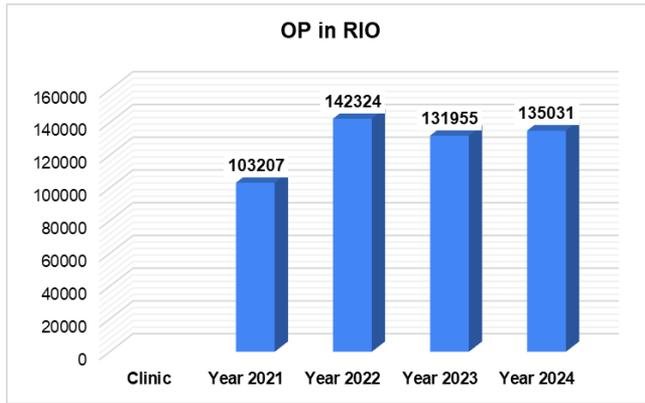


Figure 23. OP statistics in RIO Thiruvananthapuram

3. 5. 1. Type of outpatients attending RIO

Referral OP and Local OP showed a static trend and casualty OP cases remained static in 2023 and 2024.

Table 12. Outpatients attending RIO

Sl no	Clinic	Year 2021	Year 2022	Year 2023	Year 2024
1	RIO Casualty	44165	52597	41118	42718
2	RIO Local OP	29363	43875	44686	47039
3	RIO Referral OP	29679	45852	46151	45274

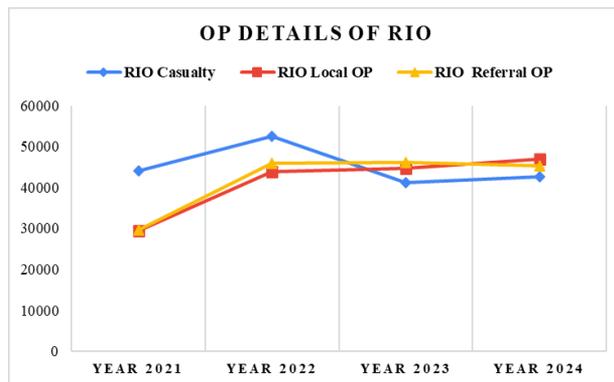


Figure 24. OP statistics in RIO

3. 6. Investigations/ procedures done in 2024

Table 13. Investigations/ procedures done in 2024

Department	Total Procedures / Investigations
Radio diagnosis	7, 64, 220
Biochemistry	6, 86, 438
Microbiology including molecular testing	2, 48, 225
Blood Bank	processed 3. 5 lakh TTI tests
	Issued over 46, 000 components.
Pathology	2, 92, 278
Pharmacology (PvPI)	314
Nephrology	8 renal transplants,
	783 central venous catheters
	320 biopsies.
"Mrithasanjeevani" Deceased Donor Multi-Organ Transplantation Programme	Facilitated over 913 organ transplants from 323 donors statewide
Paediatric neurology	5508
ENT	8411
Dermatology & Venerology	2617

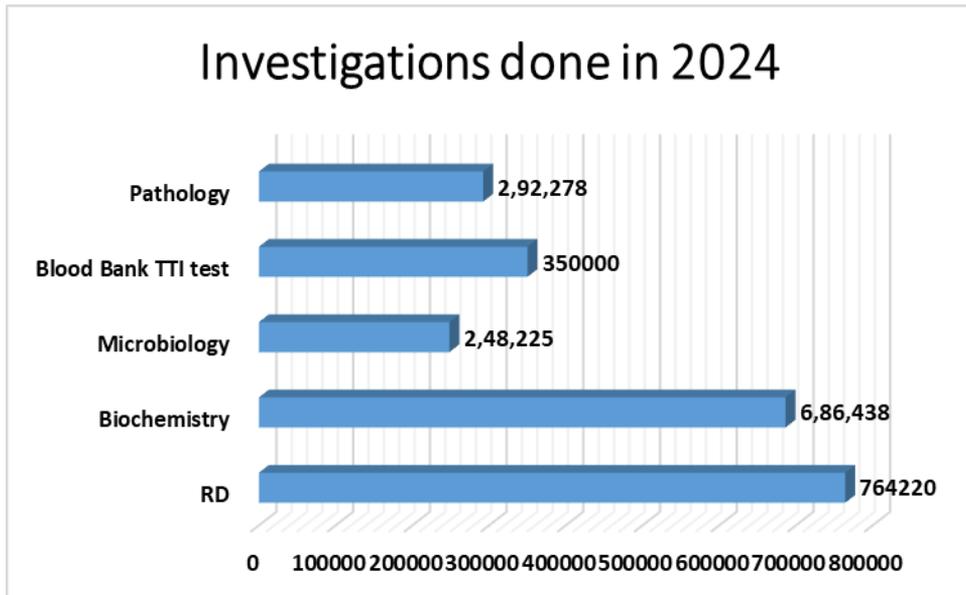


Figure 25. Investigations/ procedures done in Medical College Hospitals

3. 7. Intensive Care Unit

There are a total of 399, intensive care unit beds in the hospital spread among 21 Intensive Care units. The bed occupancy averages to about 100% for the last three years. All the ICUs are equipped with Ventilators, Defibrillators, Multipara monitors and Infusion pumps. Total number of high dependency beds are 66. The ICUs are- Medical ICU-MICU 1, MICU 2, MICU 4, Fever ICU (Isolation ICU)- 37 beds, Surgical ICU -SICU- 16 beds, Neonatal -NICU-42 beds.

Paediatrics-PICU, Paediatric step down ICU, Paediatric ER ICU, POST CARDIAC SURGERY ICU(Paediatric cardiology)-55beds, Intensive Coronary Care Unit-ICCU(Cardiology)-39 beds, Critical care unit-CCU(Anaesthesiology)-11 beds, Emergency Medicine-EM ICU, Medicine Red Zone HDU, Surgery Red Zone HDU- 15 beds, Obstetrics & Gynecology-MITU-11 beds, Paediatric Surgery ICU- 10 beds, Respiratory Medicine-IRCU-4 beds, Neuro Surgery Trauma ICU, Neuro Surgery-Elective-24 beds, CVTS ICU-18 beds

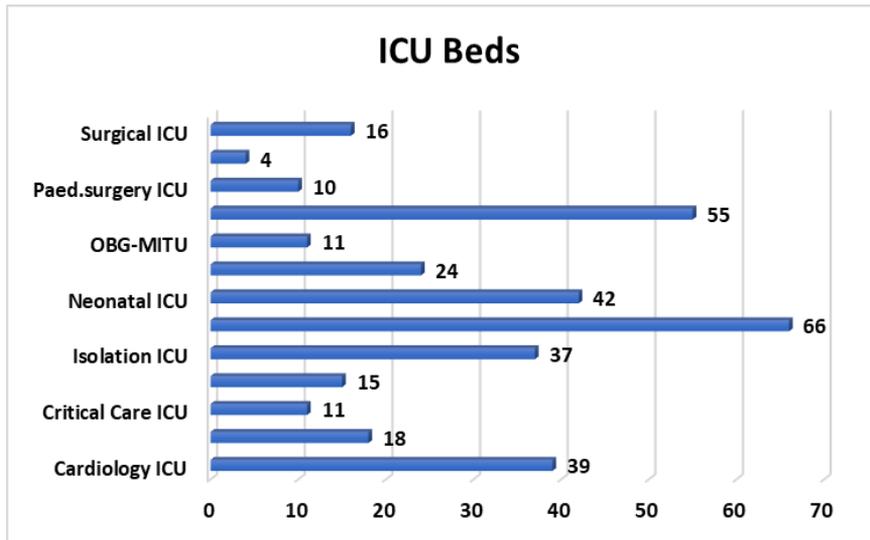


Figure 26. ICU beds in Various departments in Medical College.

3.8. Department-wise Details

3.8.1 Preclinical Departments

3.8.1.1 Anatomy

The Department of Anatomy at Government Medical College, Thiruvananthapuram is premier centre for anatomical education, training and research. In addition to academic training, the department regularly conducts collaborative workshops for various clinical specialties including Orthopaedics, Neurosurgery, Cardiovascular and Thoracic Surgery, and Obstetrics & Gynecology postgraduate trainees. The department also maintains a well-established cadaver embalming facility, undertaking embalming procedures for cadavers and coordinating their transportation both within the state and outside Kerala.

Equipment & Facilities:

- Dissection Hall, Histology Lab, Genetic Lab, Embryology, Neuro-Anatomy Research labs, Morphometry lab. Cadaveric tank, Cooling chamber, meat cutting machine, microtome, Paraffin Embedding bath, Hot plates for flattening section, tissue processor.

- Microscopes -Monocular self-illuminating, Special Microscopes-Trinocular and binocular microscopes - self illuminating Microscopes with Working Camera fitted to microscope.
- General and Special Stained Histology Slides, Developing Embryo slides, Chick embryo slides
- Embalming Machines and Reagents, Equipment and Reagents for Karyotyping/Chromosome Analysis, CO2 incubator, Centrifuge, Slide warming table, Autoclave, Hot air oven Anatomical Specimens: separate head and neck bone like ethmoid, sphenoid bones, Separate Bones of Hand And Foot, Developing Bones Showing Epiphysis

Clinical Services

- Cadaver embalming facility, undertaking embalming procedures for cadavers and coordinating their transportation both within the state and outside Kerala.

Operational Statistics

- A total of 73 embalming have been done in the year 2025

3. 8. 1. 2. Physiology

The Department of Physiology, GMC Thiruvananthapuram is dedicated to teaching, research and clinical services and is largely successful in its endeavour for excellence in the field. The Department offers a range of clinical laboratory services to support patient care, operating through its Clinical Physiology Unit, which is a unique facility offering specialized services. Clinical Physiology Unit stands out for its Nerve Conduction Studies (NCS), Pulmonary Function Tests (PFTs). Since its inception, the department has successfully conducted over 5,000 Pulmonary Function Tests and over 200 Nerve Conduction Studies. Additionally, The Department offers Heart Rate Variability (HRV) tests in the Autonomic Function Test Lab, located within the Multi-Disciplinary Research Laboratory. The Clinical Physiology Unit provides electrodiagnostic studies which includes Nerve Conduction Studies, Pulmonary Function Tests, Autonomic Function Tests, Electro-encephalograph, Electromyograph, Visual Evoked Potential, Electro-retinograph, BERA. These help in the diagnosis and planning

treatment of diseases affecting lungs, heart, nervous system, muscular system, vision and audition.

Equipment & Facilities

- Available equipment includes a digital physiograph, four-channel data acquisition system, nerve conduction study equipment, electronic stimulator, and facilities for autonomic function testing.
- Exercise physiology facilities include a treadmill, bicycle ergometer, Mosso's ergograph, handgrip dynamometer, and vitalograph for cardiopulmonary and muscular function assessment.
- Pulmonary function testing is supported by a spirometer, automated spirometer, and vitalograph, while cardiovascular assessment is facilitated through an ECG machine, blood pressure apparatus, and stethograph.
- Sensory and neurophysiology equipment includes a perimeter, ophthalmoscope, audiometer, Snellen's chart, Ishihara's chart, aesthesiometer, and periscope.
- Laboratory and general physiology equipment available comprises a pH meter, binocular microscope, kymograph, electric oscilloscope, Sahli's hemoglobinometer, hemocytometer, Westergren's pipette, and stethoscope.

Clinical Services

The department of Physiology has been conducting clinical physiology outpatient services from 2019, the first in Kerala. They provide Pulmonary Function testing and Nerve conduction studies for the patients attending the OPD. The clinic operates in Room number 109 in the Outpatient department of Medical College Hospital on all days of the week.

Specialty Clinics

- Pulmonary function testing clinic- on all days, Nerve conduction study unit- on all days

Operational Statistics

Providing clinical services since 2019. Total of 20000 pulmonary function tests and 200 Neurophysiological studies done till date. Total of 100 Nerve conduction studies done in the OP in the last three years.

Special Initiatives

- Regularly conducting neurophysiology workshops and CME programmes.

3. 8. 1. 3. Department of Biochemistry

The Department of Biochemistry is an academic preclinical department which is engaged actively in teaching, training, research and laboratory services for patient care. Undergraduate courses under the department include MBBS, BDS, BSc Optometry, BSc Nursing, Post basic BSc Nursing & various allied health science courses.

The department has facility for teaching and training 250 MBBS students and 4 MD Biochemistry students per year. We also teach and train annually 50 BDS students, 200 BSc Nursing students, 30 Post basic Nursing students, 10 Dental Hygiene students and 16 Dialysis technology students. We also provide research support to post graduate students from other pre-clinical, para clinical and clinical specialities. The department provides training for MD Biochemistry students., PhD scholars. The various clinical laboratories under the department are Central Biochemistry Lab, MCH Trivandrum, SAT Biochemistry Lab, SAT Hospital, Trivandrum and the PG research lab in the academic block. Around 2000 patients (IP & OP) utilize this facility per day.

Equipment & Facilities

The two clinical labs, one at Medical College hospital and one at SAT hospital provides 24 hrs laboratory services to the patients attending these hospitals. The department also has a PG research laboratory.

- ❖ The facility at Medical College hospital- Central Biochemistry lab has state-of-the-art fully automated clinical chemistry analysers, immunoassay analysers and fully automated electrophoresis apparatus.

- ❖ The SAT Biochemistry lab also has fully automated clinical chemistry analysers and immunoassay analysers
- ❖ The PG research laboratory is equipped with a spectrophotometer, pH meter, ELISA, semiauto analyser, PCR machine with gel doc and laminar airflow.

Clinical Services

The tests done include basic biochemistry panel tests, special investigations like tumour markers, hormones, electrophoresis, Metabolic screening for inborn errors, Molecular Biology related research projects for MD students in collaboration with MDRL

List of Investigation in Central Biochemistry lab

1. Glucose	8. Bilirubin total	15. Triglyceride
2. Urea	9. Bilirubin direct	16. HDL
3. Creatinine	10. Total protein	17. LDL
4. Cholesterol	11. Albumin	18. Sodium
5. Calcium	12. ALP	19. Potassium
6. Phosphorus	13. ALT	20. Chloride
7. Uric Acid	14. AST	21. CSF Protein

Special Investigations:

1. HbA1C	7. Trop T	12. Ferritin
2. T3	8. AFP(Alpha fetoprotein)	13. CA 125
3. T4	9. PSA	14. Anti TPO
4. TSH	10. CEA	15. Protein Electrophoresis
5. Free T3	11. CA 19.9	
6. FreeT4		

Operational Statistics

On average, 12500 to 15000 investigations are done each day in our lab with a total monthly workload of 3, 50, 000 investigations. We also have a fully equipped biochemistry lab in SAT Hospital which caters around 500-1000 samples daily

Table 14. Investigations done in Biochemistry

Investigations	2022	2023	2024
Glucose	4, 50, 957	4, 48, 251	4, 30, 850
Urea	4, 65, 971	4, 71, 318	4, 53, 074
Creatinine	4, 88, 453	4, 82, 679	4, 74, 504
Serum Bilirubin	3, 18, 766	3, 33, 285	3, 33, 997
Serum Proteins	3, 03, 556	3, 16, 868	3, 16, 522
Electrolytes	4, 36, 629	4, 77, 069	4, 56, 901
Lipid Profile	2, 21, 996	2, 41, 372	2, 46, 202
Calcium	2, 54, 088	2, 51, 391	2, 69, 715
Magnesium	4, 216	4, 832	3, 620
Phosphorus	2, 46, 421	2, 50, 365	2, 57, 205
Uric Acid	2, 92, 065	2, 71, 964	2, 94, 892
Urine Analysis	15, 295	17, 549	12, 792
Pleural Fluid	262	251	240
CSF	16, 475	15, 234	21, 208
Peritoneal Fluid	172	131	142
Triglycerides (TG)	8, 189	7, 810	12, 198
HDL	8, 210	7, 936	12, 075

Investigations	2022	2023	2024
LDL	8,210	7,936	12,075
Hb Electrophoresis	5	0	0
Protein Electrophoresis	258	168	194
Serum Amylase	4,546	4,726	3,556
Serum Lipase	4,540	4,752	3,773
Serum AST	3,08,197	3,23,059	3,22,013
Serum ALT	3,08,226	3,23,351	3,19,990
Serum ALP	3,00,156	3,06,316	3,18,099
Hormonal Assays			
Thyroid Hormones			
TSH	5,865	8,429	8,863
T3	1,840	2,536	2,731
T4	1,892	2,543	2,741
FT3	887	1,183	1,532
FT4	1,070	1,441	1,796
Vitamins Assay	3,174	4,196	4,115
Iron Profile	3,561	3,614	4,410
HbA1c	2,292	2,735	2,721

Investigations	2022	2023	2024
Ferritin	465	651	369
CRP	18,365	21,606	24,605
Tumor Markers	8,771	7,019	5,825
Troponins	374	733	504
CK-MB	99	122	138
Anti-TPO	382	202	213
Cov-2G	0	0	0
IL-6	0	0	0
Procalcitonin	0	0	0

Special Initiatives

Fully integrated into the lab management system (LMS) provided by e-health thereby minimizing errors Started doing Molecular Biology related research projects for MD students collaboration with MDRL.

3. 8. 2 Para - clinical Departments

3. 8. 2. 1. Department of pharmacology

The department maintains an outstanding academic record with multiple top ranks in KUHS MD Pharmacology examinations and numerous national and international awards for posters, oral presentations, and quiz competitions. Faculty members actively contribute to academic forums through invited talks, CME sessions, webinars, and Medical Education Unit programmes. A major milestone achievement is the publication of the Kerala State Drug Formulary (3rd Edition, 2024). Research contributions include participation in multicentric randomized controlled trials, presentations at esteemed conferences, and publications in

reputed journals. Through initiatives under the National Medical College Network (NMCN), the department has developed digital learning materials aligned with the UG curriculum.

Clinical Services

ADR Monitoring Centre: Thiruvananthapuram Medical College is a designated centre for monitoring adverse drug reactions under India's Pharmacovigilance Programme (PvPI).

Special Initiatives

A major milestone achievement is the publication of the Kerala State Drug Formulary (3rd Edition, 2024). Through initiatives under the National Medical College Network (NMCN), the department has developed digital learning materials aligned with the UG curriculum, Public engagement activities such as Pharmacovigilance Week, World Antimicrobial Awareness Week, and community awareness programmes

3. 8. 2. 2 Department of microbiology

The Department of microbiology is an academic paraclinical department which is engaged actively in teaching, training, research and 24-hour laboratory services for patient care. The laboratory played an active role in responding to infectious disease events. The department established an AIDS surveillance centre in 1981. Teaching and postgraduate training Microbiology is part of the college's clinical and academic structure Coordinates the Hospital Infection Control Committee of the institute and ensures implementation of infection control practices to prevent and contain infections within the hospital.

Equipment & Facilities

Department of Microbiology is the state nodal centre for diagnostics in Sexually transmitted infections (STI), Department is having three 24 hours functioning laboratories namely Central Microbiology Lab, SAT microbiology lab, VRDL- Viral Research and Diagnostics Laboratory, automated nucleic acid extractors along with a conventional PCR machine and 3 real time PCR machines, Millipore grade water facility for molecular, BacT-ALERT 3D system for blood culture, MGIT for M. tb, VITEK 2 system for rapid and accurate identification and AST, MALDI-TOF.

Clinical Services

Bacterial C & S including AFB culture, Fungal C & S

- ❖ Serology – IgM (Dengue, Leptospira, Scrub typhus, Chikungunya, HAV, HEV, TORCH), Dengue NS1, HBsAg, Anti HCV, RPR, TPHA, Widal, ANA, Anti ds DNA, RA, CRP, ASO.
- ❖ Molecular – SARS CoV2 – RTPCR, Truenat, Rapid antigen testing, Influenza virus – RTPCR, Zika virus – RTPCR, Monkeypox – DNA PCR, Leptospira PCR, Parasitology
- ❖ ICTC, CD4 testing, State Reference Laboratory for HIV testing-NABL accredited
- ❖ CBNAAT for Mycobacterium Tuberculosis

Operational Statistics**Table 15 Operational statistics of Microbiology**

Particulars	2022	2023	2024
Bacteriology	95,696	93,000	96,212
Serology / Immunology	99,689	98,589	98,456
Mycology	1,186	1,247	1,285
Parasitology	310	385	388
Virology	34,494	22,103	30,147
Molecular Tests	20,136	7,517	7,553
HIV Testing	14,808	15,086	22,603
Mycobacteriological Culture	285	207	299

Special Initiatives

- State Reference Laboratory for HIV testing and STI, Viral Research Diagnostics Laboratory (VRDL) under DHR-ICMR Scheme of Establishment of a network of Laboratories for managing epidemics and Natural Calamities
- VRDL GMC TVM has participated in the sampling and confirmation (14. 7. 2022) of the first case of Monkey Pox from Kerala, India. Details of data being submitted to Govt. /National authorities: - VRDLdata to DHR (Department of Health Research), AMR data to NCDC, Serology data to IDSP HBSSS and IBD data to NIE, COVID-19 data in LDMS portal, Govt of Kerala
- **KARSAP** (Kerala Antimicrobial Resistance Strategic Action Plan) – State Nodal Centre -The KARSAP has been developed involving multiple sectors and it addresses a wide range of activities required to tackle Anti-Microbial Resistance problem effectively. Department of Microbiology, GMC, Thiruvananthapuram has been the nodal centre since then. We perform WHONET data entry and analysis, KARS-NET review meetings and training workshops for network laboratories.

3. 8. 2. 3. Pathology

The Department of Pathology is running 5 Service Labs rendering 24 hour lab service which include routine blood and urine examination, bone marrow and other special investigation Cytology study of cervical smear, Fine Needle Aspiration Cytology from different sites, histopathology examination. The samples are received from Medical College Hospital, SAT Hospital and other peripheral Government hospitals. Pathologists are one of the team members for organ transplantation, mainly Kidney and Liver. Department gives training to students of PG and UG courses.

Equipment and facilities

- Total number of Laboratories in the department: -Morbid anatomy/Autopsy, - Histopathology, -Cytopathology, -Hematology, -Immuno Histo Chemistry lab.
- Instruments- Histopathology:Histokinette 2, Microtome 4, Cryostat 2, Refrigerator 2, Band saw -1, incubator-2, tissue floatation bath 2 common balance-1. hotplate-1.

- Cytopathology: Cytocentrifuge -1 Biosafety cabinet - 1 Hematology: Hematology analyser

Clinical Services

The Department of Pathology is running 5 Service Labs rendering 24 hour lab service which include routine blood and urine examination, bone marrow and other special investigation Cytology study of cervical smear, Fine Needle Aspiration Cytology from different sites, histopathology examination. The samples are received from Medical College Hospital, SAT Hospital and other peripheral Government hospitals. Pathologists are one of the team members for organ transplantation, mainly Kidney and Liver.

Operational Statistics

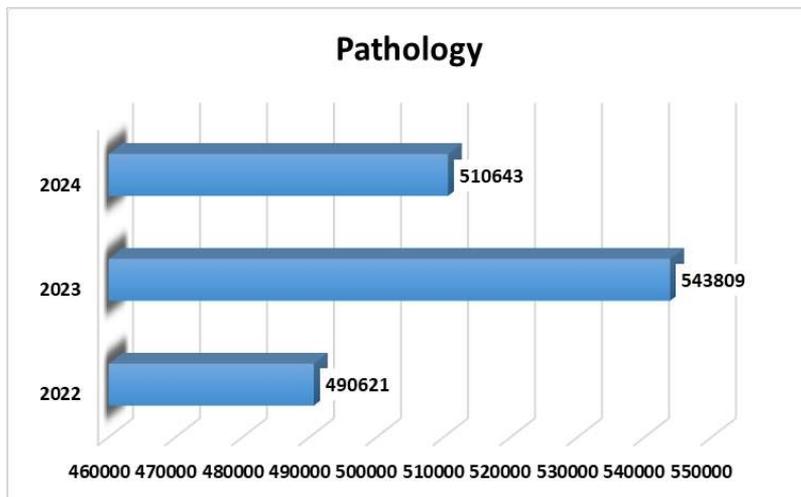


Figure 27. Operational Statistics of pathology Department 2022-2024

Table 16. Operational statistics of Pathology

Total number of investigations	2022	2023	2024
Histopathology	24269	24148	24633
Frozen sections	88	86	83
Immunohistochemistry	10987	11119	12297

Haematology		359000	401666	386972
Cytopathology	Total	48138	53395	43329
	Fluid cytology	2079	2297	1886
	Exfoliative Cytology	10884	9667	9113
	FNAC Direct	2694	2071	1808
	FNAC CT guided	793	798	589
	FNAC- USG guided	1134	1540	1878
	PBF	29794	36313	27353
	Bone Marrow	761	709	702

3. 8. 2. 4. Department of Forensic medicine

The department handles a wide spectrum of complex deaths with meticulous documentation and evidence presentation before various courts. In addition, it undertakes clinical forensic examinations across diverse criminal contexts. As a leading centre for training and research, the State Medicolegal Institute offers short-term induction and in-service training for magistrates, civil judges, and police personnel of different cadres. The department is currently exploring the introduction and integration of virtual autopsy facilities with guidance and support from the Government.

Equipment & Facilities

Modern state of the art mortuary of global standards, Cold storage facility for preserving 48 dead bodies at a time, Latest and contemporary equipments and instruments for autopsy, Museum providing a rich and varied learning experience to students and faculty from various institutions. There is a good library in the Mortuary. The mortuary at Government Medical College, Thiruvananthapuram is under the Forensic Medicine Department. It is a modern, high-tech unit built in the multi-speciality block with 48 chambers, multiple autopsy tables, and specialized facilities for decomposed bodies.

Clinical Services

Handles autopsies (post-mortems) for accident, suspicious, and other cases from Thiruvananthapuram and surrounding areas and clinical forensic medicine cases

Operational Statistics

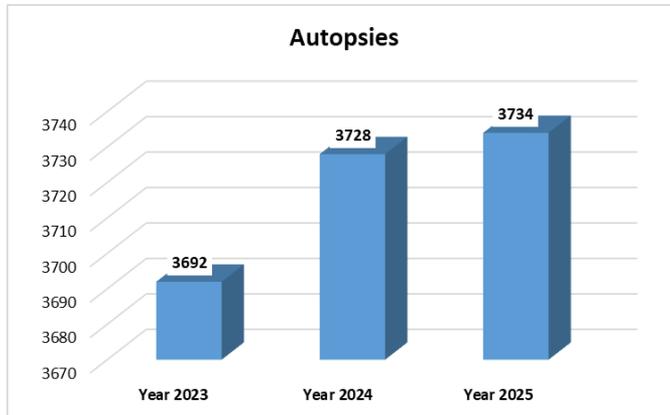


Figure 28. Operational statistics of Forensic Medicine department

Special initiatives

Since its inception in 1951, the State Medicolegal institute continues to provide quality medicolegal services including teaching of medical students and imparting training to judicial and police officers of various cadres. With one of the highest number of autopsies performed in the State of Kerala, it engages with high profile and variedly complex cases of death, strengthening the death investigation procedures of State law enforcement agencies. Serving as a viable and sustainable platform for academics including research work it widens the scope and outreach of the discipline of Forensic Medicine.

3. 8. 2. 5 Community Medicine

Department of Community Medicine is the premier public health training and research institution for medical professionals in the state of Kerala. The department offers a postgraduate course for medical professionals. The department moulds the undergraduate medical students towards being public health minded while pursuing their career in any specialty. The Department has an Urban Health training centre at Pangappara and a Rural

Health training centre at Vakkom, where all the students are empowered in Primary Health Care.

The Department, along with State Prevention of Epidemic and Infectious Diseases Cell which is also under the additional charge of Head of the Department of Community Medicine, provides expert consultations to the Government of Kerala in tackling all public health emergencies. The Department functions in tandem with various government departments and agencies such as District Collectorate, Directorate of Health services, District Medical Office, Disaster Management, State Health Systems Resource centre, National Health Mission and so on, as per requirement by providing expert human resource and consultations.

The department promotes quality medical research and collaborates with governmental and non-governmental agencies in carrying out public health activities all over the state. Research methodology workshops are conducted every year for all the post graduate students in the institute, empowering them to undertake their thesis works.

Equipment & Facilities

Spirometry, Otoscope, Glucometer, Height Machine/Stadiometer, Adult, and infant Weighing Machine, Infantometer, Calipers, non-stretchable tapes, MUAC/ Shakir's tape, Haemoglobinometer -Sahali's/Digital, Compound Microscope, BP Apparatus

Clinical Services

Preventive clinic: A 24 hours Preventive clinic in GMC Thiruvananthapuram is managed by the Department of Community medicine where Adult Immunisations are provided especially Anti Rabies vaccination and Immunoglobulin administration. Cases from periphery including neighbouring districts are referred here for expert opinion.

Local OP: The Department of Community Medicine also runs a Local OP catering to the nearby local population since GMC Thiruvananthapuram is a referral centre.

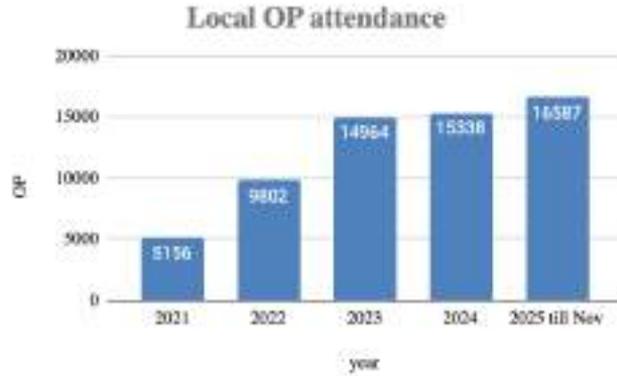


Figure 29. Outpatients attending Local OP

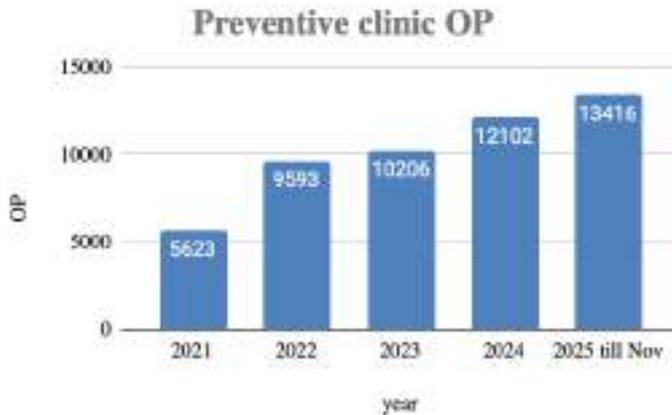


Figure 30. Outpatients attending Preventive Clinic

Special Initiatives

Health day celebrations -World Health Day, World rabies day, World Asthma Day, World hand Hygiene Day, Antibiotic stewardship program, World breast feeding week observation, Research Methodology Workshop, Community Health Screening Camp for Migrant Workers

3. 8. 3. Clinical Broad Specialty Departments

3. 8. 3. 1. Anaesthesiology

The Department of Anesthesiology manages patient care before, during, and after surgery, specializing in pain management and administering anesthesia to ensure patient safety and

comfort. Manages well-equipped Operation Theatres (OTs) with modern anesthesia machines, ventilators, multi-parameter monitors, and specialized equipment for difficult airways and pain blocks. The department also runs critical care ICU (MDICU) for intensive care services. Postgraduate teaching in Anesthesiology was initiated 52 years ago, reflecting the department's long-standing academic excellence. At present, the department offers 18 postgraduate (PG) seats, supporting advanced training and clinical research in the specialty.

Equipment & Facilities

Operating Tables, Laryngoscope (Macintosh), Flexible Bronchoscope, Second generation Supraglottic Airway devices, Video-laryngoscope, Resuscitation equipment/Crash cart, Defibrillators, Ultrasound machine with 3 probes (Linear, curvilinear, and phased array), Patient warming devices, TEG, BIS Monitor, PCA Pump, NMT, ABG Machine, ICU Ventilators.

Clinical Services

Preoperative Assessment (PAC), major and minor surgeries anesthesia procedures/techniques, General Anaesthesia (GA), Central neuraxial blocks, Nerve blocks, GA + Regional Block, Monitored Anaesthesia Care under Sedation, Non-operating room anaesthesia (NORA), labour analgesia, Interventional Pain Procedures, Tertiary care.

Specialty Clinics:

Pain clinic: In 2022, a total of 4,500 patient visits were recorded, 4,700 visits in 2023 and 4200 visits in 2024. Intervention pain procedures averaged 10 per year

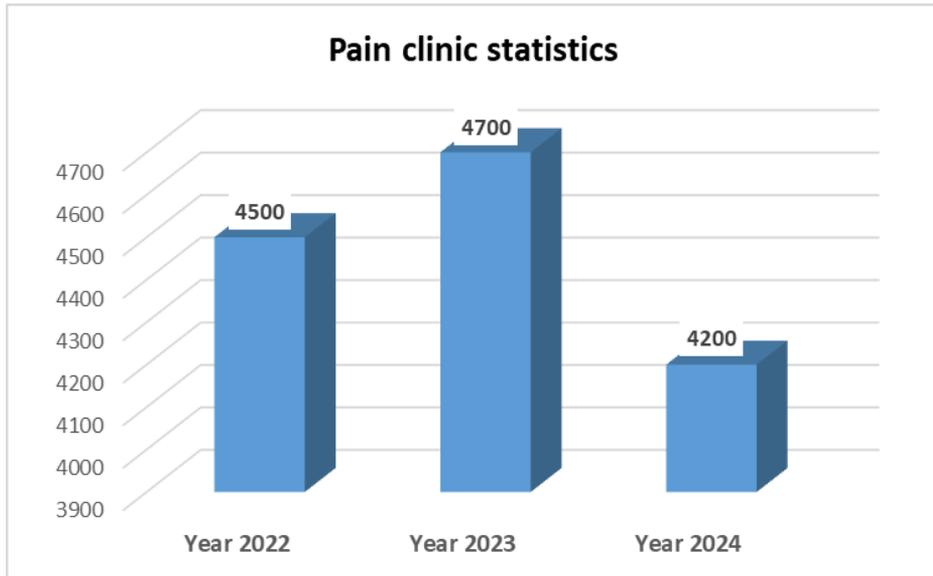


Figure 31. Pain clinic attendance

Pre-anesthetic clinic: In 2022, the clinic managed 122, 421 patient visits. This number rose to 123, 196 in 2023 and continued to increase in 2024, reaching 124, 216 visits

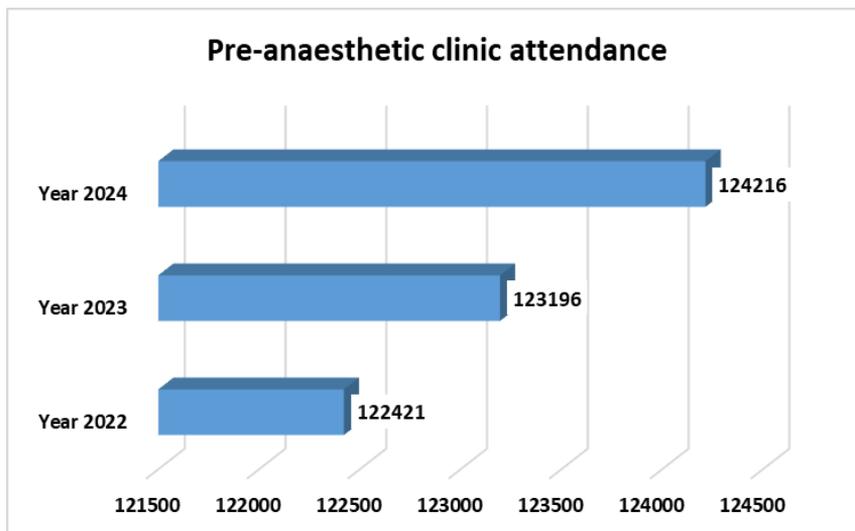


Figure 32. Pre-anaesthetic clinic attendance

Clinical Work done by Department of Anaesthesiology

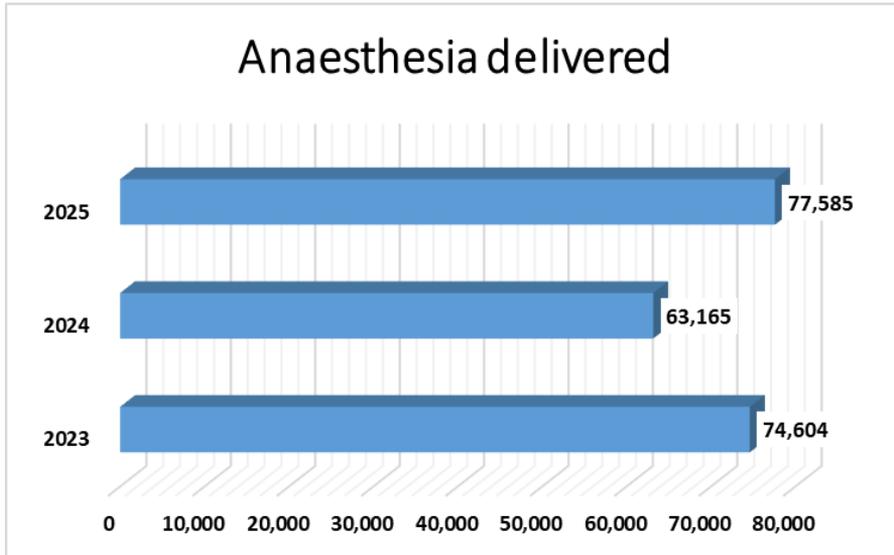


Figure 33. Total anaesthesia delivered in surgeries

Details of procedure done through Department of anaesthesia

Table 17. Clinical Work done by Department of Anaesthesiology

Details of procedure	2023	2024	2025
Major Surgeries	22,087	21,916	23,116
Minor Surgeries under Local Anaesthesia	8,798	9,213	10,204
Number of Deliveries in the Institute	12,600	13,00	13,500
Labour Analgesia	5	4	8
Number of Caesarean Sections	3,467	3,514	3,995

Number of Patients Seen in Pain Clinic	4,500	4,700	4,200
Interventional Pain Procedures	10	10	8
Number of Emergency Surgeries	6,566	6,778	6,159

Clinical Work done by Department of Anaesthesiology

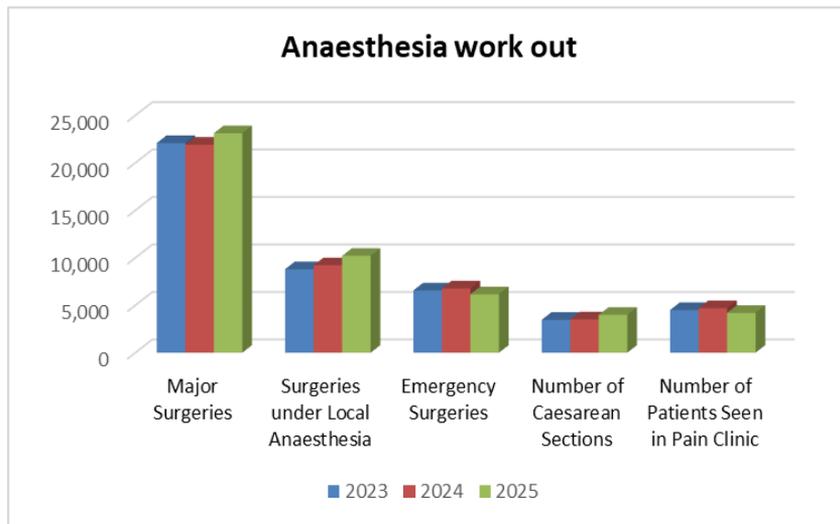


Figure 34. Total anaesthesia delivered in surgeries

3. 8. 3. 2. Dermatology and Venerology

The Dermatology Department involved in training of UG and PG students along with patient care and research activities.

Equipment & Facilities

Dermoscope, Electrocautery machine, Microderma abrader, NBUVB Chamber, Whole body UV Chamber, CO2 Laser, Diode Laser, NdYAG Laser, Multiutility IPL Laser, Excimer Laser, Hyfrecator/electro-surgical instrument, Liquid nitrogen cryo, Chemical Peels, PUVA Chamber (total body) Laser for hair reduction, scar revision, pigment removal and Other routine equipment

Clinical Services

The Department of Dermatology conducts Vitiligo & Pigmentary disease Clinic, Psoriasis Clinic, Autoimmune disease clinic, vesiculobullous diseases, Hansen's clinic, STD Clinic and Contact dermatitis clinic on all days of the week. The department regularly does procedures like skin Biopsies, Skin grafting procedures, Electro Surgical Procedures, Other surgical procedures like -PRP, DPCP, Microdermabrasion, Paring, Subcision, Comedone Extraction, Punch grafting, Laser Procedures, Intralesional injections, Hair reduction, scar revision, pigment removal, NUVB/PUVA therapy as part of patient care services.

Operational Statistics

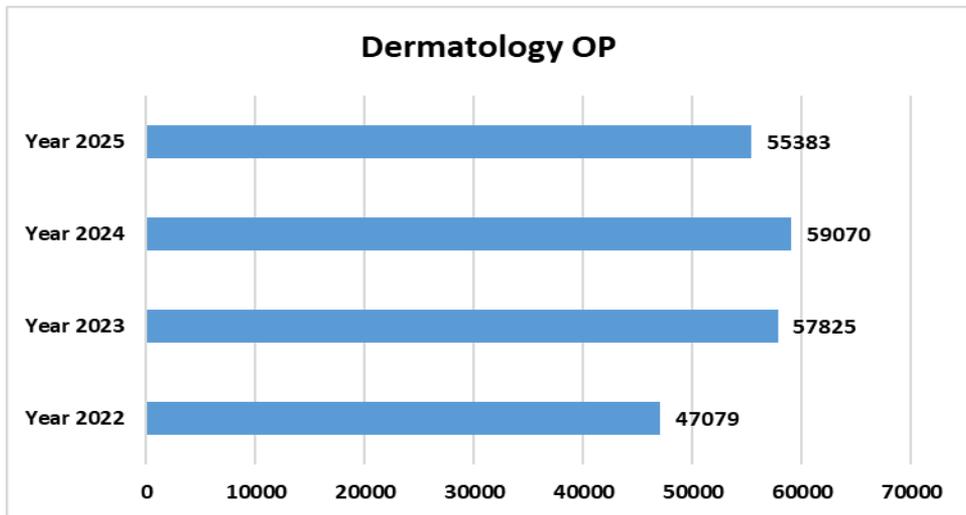


Figure 35. Dermatology OP statistics

Table 18. Speciality clinics run by the department of DVL and average case load

Name of the clinic	Average number of cases a day
Vitiligo and pigmentary disease clinic	18
Psoriasis clinic	25
Autoimmune disease clinic	9
Vesiculobullous diseases	14
Hansen's clinic	7
STD clinic	14
Contact dermatitis clinic	32

3. 8. 3. 3 Emergency Medicine

The department started the new emergency department has started functioning from 01. 09. 2019 with upgraded facilities for emergency care, a scientific triage system has been introduced. It is one of five medical colleges in the country selected by NITI Aayog and ICMR for emergency medicine research.

Equipment & Facilities

Emergency Medicine Department currently functions under the following modalities for obtaining the best practices.

1. **Triage:** Prioritization done.
2. **Green Zone:** with 12 beds and monitors for keeping patients who need observation for a short while. Also vaccination duties are done there.
3. **Yellow Zone:** 53 beds with monitors and central oxygen supply. Here patients are kept for observation, they may get admitted or sent home or local hospital if found problem free.

4. **Red (zone)Surgery** with 5 Ventilators and casualty with 7 monitors. Separate channel for polytrauma with immediate CT scan and FAST Facilities and direct shifting to EOT without delay.
5. **Medicine Red Zone** with 10 monitors and chest pain unit with 3 beds and ventilators. Also a 24-hour functioning stroke unit is there in the casualty with 3 CT machines. Also Orthopaedics, ENT and OMFS casualties with monitors, defibrillators and other facilities.
6. **Emergency Ward-22** is the admission ward for Emergency Medicine and preoperative stabilisation.
7. **Emergency Medicine Theatre** with 5 theatres round the clock.
8. **EMICU:** 7 Beds with ventilators and multichannel monitors.
9. **Burns Unit:** Centre of Excellence award was given to the Department of Emergency Medicine in view of the following factors: - (Personnel from WHO and AIIMS does frequent visits to the department)
 - a. **Golden Hour initiative** for trauma initiated under the State Government as per the instruction of the Chief Minister. Treatment is free for Patients coming in golden hour, that is first 48 hours.
 - b. **ICMR Project, on the topic** “Adaptive model to strengthen facility-based emergency care system for providing quality emergency care among red triage patients (Time sensitive and other emergencies) at all levels of health care facilities”.
 - c. **ATELC** functions vigorously giving training for ATLS, BLS & ACLS. for medical and paramedical workers. BLS and ACLS ambulance services
 - d. **Red tags and Red seal** given for trauma patient to avoid delay for investigation & CT.
 - e. **Red zone Surgery** with ventilators and Multi Channel Monitor round the clock.
 - f. **Portable ventilators** at Surgery Casualty for effective shifting from casualty to Surgery ICU/CT/MRI/EOT
 - g. **24 hours are functioning Emergency Operation Theatre** near to the Surgery Casualty with separate tables for Orthopaedics, Neuro Surgery, Surgery and OMFS, ENT, CTVS, Plastic Surgery

NPPMT& BI Programme: Eight centres in India selected as centre of excellence. Trivandrum Medical College is also included.

Clinical Services

The routinely done procedures are- emergency Central line placement, Chest tube insertion, Cardioversion/defibrillation, Incision and drainage of abscess and Endotracheal intubations. Major trauma primary care like splinting/dressing, lifesaving procedures like- Tracheostomy and, Transcutaneous Pacing and OP visits.

Table 19. Details of procedures done in Emergency Medicine Department

Procedures	Number of cases (as per 2024)
Central line placement	720
Non-invasive ventilations	1000
Pleural tapping/Chest tube insertion	1200
Pericardiocentesis	5
Cardioversion/ Defibrillation	3000
Incision and Drainage of Abscess	10000
Endotracheal intubation with direct laryngoscopy	30000
Major trauma primary care like splinting	50000
Tracheostomy	200

Ultrasonography	150001
Transcutaneous pacing	100
Regional block	40000
Endotracheal intubation with video laryngoscopy	10000

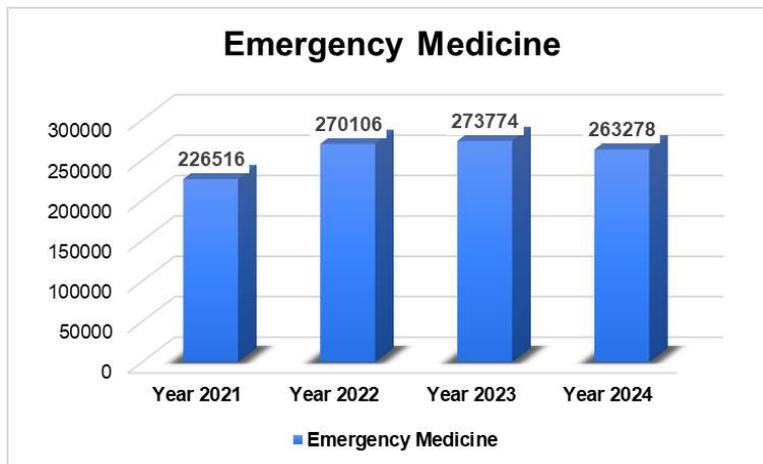


Figure 35. Outpatient load in Emergency Medicine department

3. 8. 3. 4. Otorhinolaryngology (ENT)

The ENT department has developed as a full-fledged specialty over the years. ENT department of Thiruvananthapuram Medical College is the second Govt institution in Kerala to start cochlear implantation under *Sruthitharangam* scheme of Govt of Kerala from 2012. The operation theatre is well equipped. The Audiology department is also well equipped, providing new-born screening for hearing, auditory verbal rehabilitation for cochlear implanted children and adults in addition to regular services. The department is the nodal centre for National Program for Prevention and Control of Deafness (NPPCD) in Kerala, with a 4-station temporal bone lab.

Equipment & Facilities

- Research Laboratory: Stroboscope, video nystagmograph, voice analysis software.
- Audiometry Room: OAE, BERA, impedance audiometer, pure tone audiometer.
- Speech Therapy Room: VAGMI software, therapy materials.
- Minor OT: Bull's eye lamp, ENT instruments, endoscopy unit, suction apparatus, sterilizer.
- Temporal Bone Dissection Laboratory: Microscope, microdrill, micromotor, temporal bone holder.
- Advanced Equipment: Carbon dioxide laser, coblation machine, Leica operating microscope, Stryker microdebrider, Medtronic microdebrider, air compressor system, Karl Storz single-chip endoscope camera with light source, BERA and tympanometer, flexible nasopharyngo-laryngoscope, strobe video rhino laryngoscope, facial nerve monitor, portable clinical audiometer, HD CMOS laparoscopic system, hypopharyngoscope with accessories, Leica surgical microscope, flexible bronchoscope.
- Endoscopic & Surgical Sets: Esophagoscopy set, microlaryngoscopy set, sinus endoscopy set, mastoidectomy set, tympanoplasty set, septoplasty set, tonsillectomy set, maxillectomy set, nerve stimulator.

Clinical Services

The department provides clinical services as speech therapy, audiology services, neonatal screening programmes, speech and voice analysis and diagnostic endoscopy. It also provides diagnostic services like -nerve conduction, EMG studies.

Specialty Clinics

The department conducts Otology, rhinology, and related cancer clinics on a daily basis.



Figure 36. Outpatient load in ENT department

3. 8. 3. 5. General Medicine

The Department of General Medicine is a central pillar of patient care and academic excellence at our institution. Established with the inception of the Medical College, the department provides comprehensive adult healthcare, encompassing expert consultation, precise diagnostic evaluation, and personalized treatment. The department manages ICU beds dedicated to the care of critically ill patients. It further supports specialized services through the Regional Geriatric Centre, ART Centre, and Hematology Department, along with dedicated specialty clinics in hematology, thyroid disorders, and hypertension. In addition to routine services, the department also provides dedicated medical care to the Governor and elected representatives. The department additionally offers several medical board members for institutional and state-level requirements.

As a cornerstone of medical education, the department provides comprehensive instruction for 250 MBBS students and 24 postgraduate trainees each year. Additionally, the department plays an important role in the training programs of dental, nursing, and paramedical students. The department's academic ecosystem emphasizes clinical skills, bedside learning, and ethical practice.

Equipment & Facilities

Dialysis machines, Resuscitation kit, Pulse Oximeter, Crash cart, ECG, TMT, Defibrillator, medical ICU with ventilators and multipara monitor dialysis facility

Clinical Services

OP and IP services-The department of General Medicine controls and supervises 4 intensive care units: MICU (3) and Fever ICU, It regularly conducts invasive procedures like Central line placement, Pleural tapping, chest tube insertion, endotracheal intubation, ascites tapping, lumbar puncture and bone marrow biopsy, Non-invasive procedures like ventilation and cardioversion are also regularly performed.

Specialty Clinics

The department runs Endocrine clinic, Haematology, Rheumatology and Thyroid clinic on specific days.

Anti-Retroviral Therapy (ART) Centre: ART centre provides care for people living with HIV. In addition to routine service delivery, the centre contributes to surveillance and reporting, trains healthcare workers, and implements updated national HIV treatment guidelines within the medical college and its referral network. **ART Plus** centre, enabling initiation and ongoing management of second-line and other complex ART regimens in addition to standard first-line therapy.

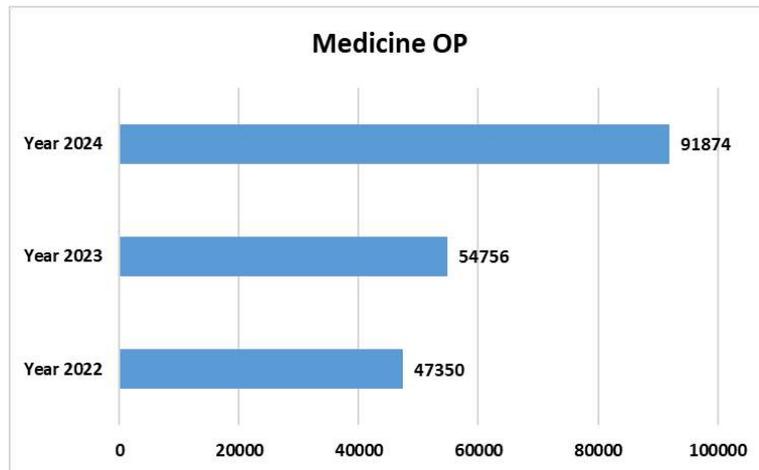


Figure 37. Outpatient load in General Medicine department

3. 8. 3. 6. General Surgery

The General Surgery Department is a well-established unit, offering comprehensive surgical care for various conditions, from basic procedures to advanced laparoscopic surgeries, with multiple surgical units, conducts specialty clinics for Vascular, Breast, Thyroid diseases. They handle a wide range of open and minimally invasive surgeries, serving as a major teaching hospital with experienced faculty and modern facilities for both inpatients and outpatients, a core part of Kerala's premier medical institution.

Equipment and facilities

Upper GI Endoscope set, Lower GI Endoscope set, Laparoscopy equipment set (write total no of functioning sets available with the Department), Ultrasonic Dissector/Coagulator, Vessel Sealing Equipment. Ultrasonography machine with Doppler facility linear, convex and cardiac probe and puncture guide Laparoscopy Trainers.

Surgical ICU (under care of General Surgery)- Major equipment in ICU available are Infusion pump, USG machine, Chest vibrator, Syringe pump, Warmer Defibrillator.

Clinical services

Upper GI endoscopy, Colonoscopy, Surgery for inguinal hernia(open), Surgery for inguinal hernia (Laparoscopy), Surgery for incisional hernia-open, Surgeries for other hernias, Hemi thyroidectomy, Total thyroidectomy, Excision Biopsy of Cervical Lymph node, Axillary Lymph node Biopsy, Excision of benign breast lump, Modified Radical mastectomy, Split thickness skin graft, Laparoscopic Cholecystectomy, Open Cholecystectomy, Laparoscopic Appendectomy, Open Appendectomy, Surgeries Intestinal obstruction, Colostomy, Management of Liver Abscess, Surgery for Hydatid Cyst of liver, Splenectomy, Varicose Vein surgery, Superficial Parotidectomy, Submandibular gland excision, Pancreaticoduodenal resection, Other Pancreatic surgery, Stomach perforation surgeries, Stomach malignancy surgeries, Surgeries for Soft tissue tumours, Craniotomy, Prostatectomy, Anterior resection, AP resection, Hemicolectomy.

The Department manages the surgery intensive care unit-SICU, which has a total of 16 beds available. Total number of outpatients attending the surgery department over the last 3 years indicates a constant patient load seeking care from surgery department.

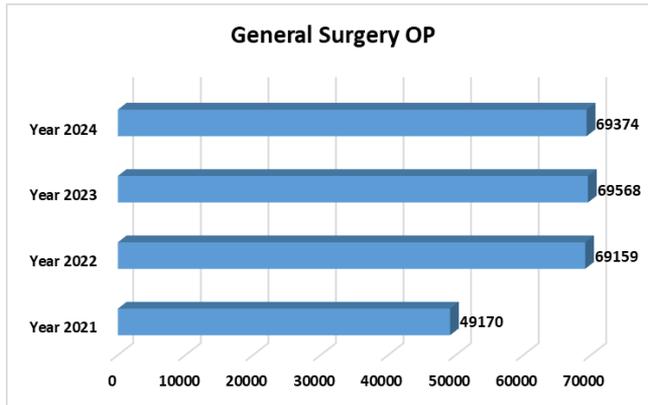


Figure 38. General Surgery Outpatients

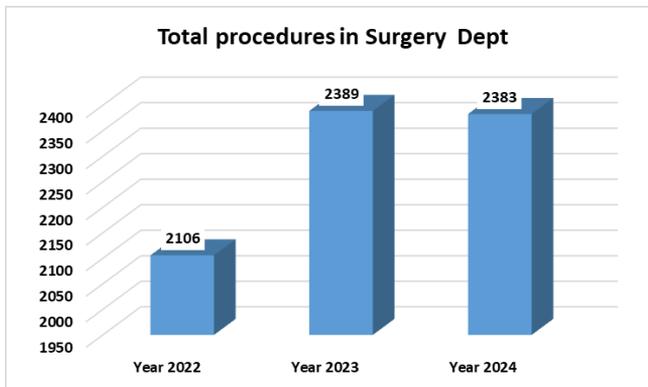


Figure 39. Surgical procedures done in General Surgery Department.

Details of various surgeries done over the last 3 years:

Table 18. Details of General Surgery workload

Name of the surgery	2022	2023	2024
Inguinal hernia(open)	160	182	175
Inguinal Hernia (laparoscopic)	52	45	48
Incisional hernia	172	160	178

Other hernias	89	92	98
Hemi thyroidectomy	35	60	65
Total thyroidectomy	108	134	125
Excision biopsy of cervical lymph node	90	72	84
Axillary lymph node biopsy	45	88	49
Excision of benign breast lump	132	119	117
Modified radical mastectomy	176	135	165
Split thickness skin graft	70	82	67
Laparoscopic cholecystectomy	114	98	94
Open cholecystectomy	55	100	103
Laparoscopic appendectomy	90	78	74
Open appendectomy	79	140	129
Intestinal obstruction surgeries	115	174	158
Colostomy	139	180	191
Management of liver abscess	42	38	36
Surgery for hydatid cyst	0	1	1

Splenectomy	32	48	46
Varicose vein surgery	79	110	115
Superficial parotidectomy	38	37	29
Submandibular gland excision	31	25	37
Pancreaticoduodenal resection	9	11	16
Other pancreatic surgery	7	10	8
Stomach perforation surgeries	68	73	63
Stomach malignancy surgeries	18	15	18
Soft tissue tumours	7	5	9
AP resection	10	15	16
Hemicolectomy	17	30	36
Other	27	32	33

3. 8. 3. 7. Infectious diseases

The Department takes care of patients with all sorts of infections ranging from tropical infections like dengue to emerging infections like Nipah or Amoebic meningoencephalitis. In this era of antimicrobial resistance, it's the responsibility of the ID department to prevent and treat patients with antimicrobial resistant infections like carbapenem resistant enterobacteriales infection. Treatment of infections in immunocompromised, post-transplant settings, chemotherapy etc also come under purview of the department. The department is an integral part of hospital antimicrobial stewardship and Infection control committee.

Travel medicine, Outpatient antibiotic therapy, vaccination in immunocompromised etc are also dealt with by the ID department. Infectious disease department is playing a pivotal role in functioning of **Outbreak Monitoring Unit** for early detection and management of infectious disease outbreaks and its control.

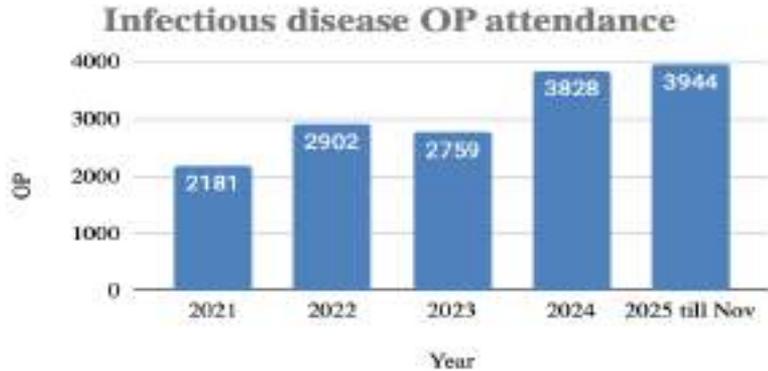


Figure 40. Outpatients in Infectious Diseases Department

Details of OP in General Medicine and allied specialities.

Table 19. OP in General Medicine and allied specialities.

Department	Year 2021	Year 2022	Year 2023	Year 2024
General Medicine	39347	47217	54592	54222
Dermatology & Venerology	31193	46878	57483	58703
Psychiatry	23225	32132	45642	41471
Infectious Disease	2181	2902	2759	3828
Local OP	5156	9802	14964	15338

Outpatient patient load increased in all medical specialities except infectious diseases may be due to the fact that, being a tertiary care referral hospital, infectious diseases are generally

being referred and subsequently registered in the General Medicine Department, and treatment decisions are made in consultation with the Infectious Disease department.

3. 8. 3. 8. Obstetrics and Gynaecology

The department handles a high volume of patients, including outpatient care for Antenatal, Gynaecological, Postnatal, and Infertility patients. It also provides specialized services like High-Risk Pregnancy Management, Complicated Gynaec surgeries, Gynaec Oncology Services and Infertility treatment. The Obstetrics and Gynaecology department, provides Comprehensive services, including OPD consultations from Monday to Saturday for Antenatal, Gynaecological patients & Postnatal services. Additional specialty services are offered through dedicated clinics such as the Endocrine clinic, Trophoblastic disease clinic, HIV Clinic, Adolescent clinic, Psychiatry clinic and Hematology clinic. The Fetal Medicine department offers High-Risk Antenatal care and Prenatal diagnostic services.

Equipment & Facilities

Labour room, Septic labour room, Obstetric High Dependency Unit, Mother's intensive treatment unit, Major operation theatre complex, Minor Operation theatre Emergency operation theatre complex, Post operative ward, Obstetrics & Gynaec - General ward, Demonstration Room, Skill Lab, Ultrasound Scan

Clinical Services

The department provides clinical services as - conducting Normal vaginal delivery, caesarean section, Instrumental deliveries, V BAC, Breech delivery. Total number of deliveries per week averages around 185. The total vaginal deliveries in the last year was 5166 and Caesarean section (LSCS) was 3339. Minor and major Gynaec surgeries, Cancer Screening Services, Endoscopy, Laparoscopy surgeries

There is a decreasing trend of Gynaecology cases compared to obstetric cases which is not showing any trend over the last 3 years.

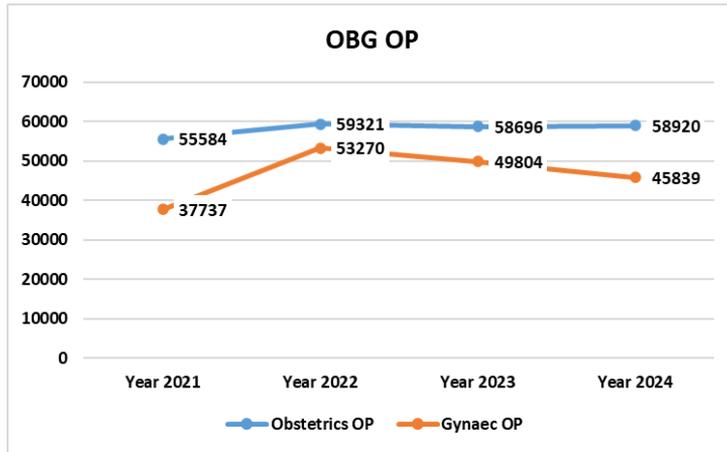


Figure 41. Obstetrics and Gynaecology Department clinical attendance

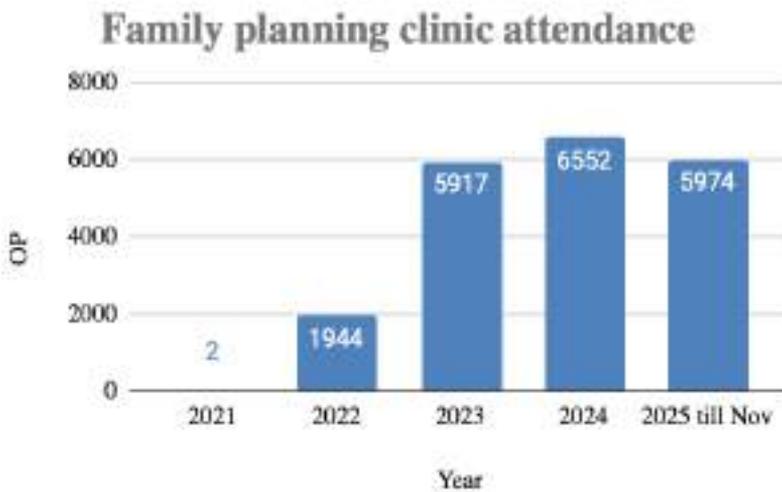


Figure 42. Family planning clinical attendance.

3. 8. 3. 9. Ophthalmology

Ophthalmic hospital has 250 bedded hospital with specialized services for retina, paediatric ophthalmology, low vision, cornea and glaucoma clinics, an eye bank, tele-ophthalmology, a uvea clinic, a dispensing lab and contact-lens and cataract clinics.

Equipment & Facilities

Major Instruments: For Cataract- Operating Microscope, Ultrasound A Scan, Ultrasound B Scan, Keratometer, Specular microscope, Laser Interferometer, IOL. Master, Phaco emulsification machine. For Cornea and Refractive surgery-Pachymeter, Contrast sensitivity chart, Orbscan or Pentacam, C3R. For Vitreo -retina & Uvea-Operating microscope with Biome and re inverter, Indirect Ophthalmoscopes 6, Fundus Camera 2, Fundus fluorescein angiography (FFA), ACG, Optical Coherence Tomography (OCT), Electroretinogram(ERG)-FF+MF 1, Multifocal ERG (MIERG) 1, Micro-perimetry 1, Vitrectomy machines, Endo laser 2, Nd YAG laser for capsulotomy I, Red laser 1, Lenses for laser, Laser, Indirect Ophthalmoscopy. Cryophotocoagulation, Surgical sets required for Retinal Surgery, For Glaucoma-Gonioscope (Goldmann or 2 mirror), Non-contact tonometer, Applanation tonometer in all slit lamps, Pachymetry, Perkins tonometer/Tonopen, Standard Automated perimeter with normative database and progression analysis software, Fundus camera.

Major department specific labs: The facilities in the lab include Visual field analyzer OCT, FFA, ERG, B scan, optical dispensary, Keratometry, Facilities available: Phaco surgery, Ophthalmic laser, Retinal Surgery, Eye bank

Clinical Services

- OP services, Major Surgeries - Tarsorrhaphy, lid Repair, Ectropion & Entropion, Ptosis Correction, DCT, DCR, probing, tumour Excision With Lid Reconstruction, Strabismus, Orbital Procedures, Cyclocryo /Cylophotocoagulation, Ocular Surface - Pter Ygium Excision With Graft, Cataract- ECCE, SICS: Phacoemulsification, Secondary IOL Implantation.
- RETINA- intravitreal injections, anterior vitrectomy, PPV, scleral buckling, glaucoma, trabeculectomy, glaucoma valve, implant surgery.
- CORNEA- keratoplasty, corneal / Corneoscleral Tear Repair, C3R.
- Minor Surgical Procedures - Foreign Body Removal- Conjunctival & Corneal, Chalazion, Incision & Curettage, Epilation, Syringing, Subconjunctival Injection, suture Removal, conjunctival Tear Suturing, PST.

- LASER- YAG PI, YAG CAP, Focal & Pan Retinal Photo coagulation Keratorefractive Procedure

Specialty Clinics

- 1) Retina clinic - All days (Monday – Saturday)
- 2) Glaucoma clinic - All days (Monday – Saturday)
- 3) Squint clinic - All days (Monday – Saturday)
- 4) Cornea clinic - Alldays (Monday – Saturday).

Operational Statistics

Table 20. Type of outpatients attending RIO

Sl no	Clinic	Year 2021	Year 2022	Year 2023	Year 2024
1	RIO Casualty	44165	52597	41118	42718
2	RIO Local OP	29363	43875	44686	47039
3	RIO Referral OP	29679	45852	46151	45274

Data shows the number of cases attending local Op and referral Op remain constant but patient attending casualty decreased after the year 2022

3. 8. 3. 10. Orthopaedics

The department of orthopaedics started in 1956, providing specialized care for disease of bone, joints and musculoskeletal systems. Presently, the Orthopaedics department caters to 450 Outpatients, 200 inpatients, 100 emergencies in casualty, around 50 operations a day and around 30 arthroplasties and arthroscopies are being done a month. The department offers clinical training for students. The services provided cover fracture management, paediatric deformities like CTEV, spine disorders, arthroplasty, arthroscopy, and hand surgery.

Equipment & Facilities

Existing Beds: 217, Orthopaedic ICU Beds: 12 (First of its kind in any government orthopaedic department in India), Major and minor apex OT and emergency OT, C-Arm Machines, Arthroscopy Cart.

Clinical Services

Surgeries including PFNA2, HFN, ILN, MRFN, ETN, TENS, DHS, DCS, MIPPO, DCP, LCP, LRS, Ilizarov, wire fixation, Arthroplasty: 2-3 procedures daily (hip, knee or shoulder), Arthroscopy: ~500 procedures annually, Knee: ACL/PCL reconstruction, meniscal repair, mosaicplasty, etc Shoulder: Bankart, Remplissage, SCR, SLAP, PASTA, decompression, etc. Endoscopic Spine Surgery: Endoscopic discectomy.

Paediatric Orthopaedics surgical procedures include SUPER HIP procedure (among the first in India), Limb lengthening using LRS, Ilizarov etc, Pelvi-acetabular surgeries and congenital deformity corrections and Complex Reconstructions: Acetabular medial wall fractures using special plates, Custom prosthesis replacing entire tibia and half femur - rare limb salvage surgery.

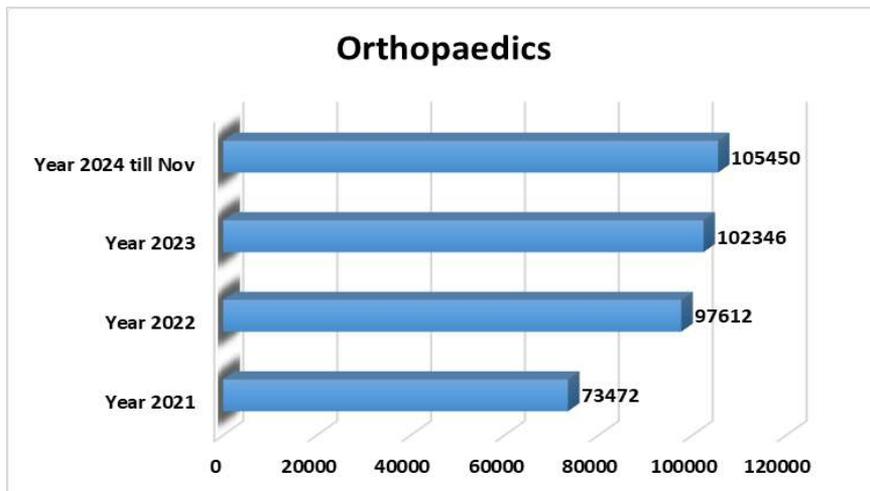


Figure 43. OP statistics of Orthopaedics Department

3. 8. 3. 11. Paediatrics

The Paediatrics department is housed in Sree Avittam Thirunal (SAT) Hospital in Medical College Campus. General Paediatrics OPDs are conducted on all days except Sundays, while Specialty OPDs are organized twice a week by their respective departments. In addition, dedicated specialty clinics such as Rheumatology, Asthma, Diabetes, Endocrine, Palliative Care, Spino-muscular Atrophy, Haemophilia, Nutrition, Rare Disease, and Genetic Clinics are held once a week to provide focused care. Behavioural Paediatrics OPD services are also available daily, except on Sundays, ensuring comprehensive paediatric healthcare coverage throughout the week.

Equipment & Facilities

OPDs, 200 IP beds including 6 bedded emergency ICU (ERICU) for stabilization of critically ill casualty patients, 19 bedded high dependency unit (HDU) for management of sick inpatients, Step down ICU (Semi ICU), with 12 bedded facility, Paediatric ICU having 19 beds with critical care unit and intermediate care unit.

Clinical Services

Outpatient care for more than one lakh seventy thousand paediatric patients per year including around 10, 000 general paediatric admissions per year,

- General Paediatrics OPDs are conducted on all days except Sundays,
- Speciality OPDs are conducted by the respective departments twice a week.

Specialty Clinics

Behavioural Paediatrics Unit is an independent unit under the Department of Paediatrics, started in 2008 by expanding the Child Guidance Clinic, to provide child and adolescent mental health services in a paediatric setting. The unit offers services for developmental disorders (autism, learning disability), behavioural disorders (conduct disorder, ADHD), emotional disorders (anxiety, childhood depression), as well as substance abuse, psychosis and bipolar disorders in children and adolescents up to 18 years. It functions from Monday to Saturday with consultation strictly by prior appointment.

The unit runs two Kerala Social Security Mission–funded projects – Autism Nodal Centre and Regional Early Intervention Centre for developmental disorders – started on 22. 09. 2018, to provide clinical, therapeutic, and rehabilitative services. A 12-member multidisciplinary team delivers occupational therapy, physiotherapy, speech therapy, clinical psychology services, ophthalmic and developmental assessments, remedial teaching and IQ assessment for children with autism, intellectual disability, expressive speech delay, specific learning disability, cerebral palsy, Down syndrome, and other behavioural and emotional disorders.

- **Respiratory / Asthma Clinic** (Wednesday): Evaluates children with chronic respiratory illnesses, including asthma. Facilities include pulmonary function testing and bronchoscopy for children admitted in the PICU.
- **Comprehensive Haemophilia Treatment Centre**: Provides care for haemophilia patients with active bleeding, factor VIII and IX prophylaxis every three weeks, advanced preventive modalities such as emicizumab therapy, and physiotherapy support.
- **Mittayi Clinic** (Monday): Dedicated to children with type 1 diabetes. Offers free insulin therapy, glucose monitoring strips, insulin pump treatment, and recreational activities to support holistic care.
- **Paediatric Gastroenterology OPD** (Monday & Thursday): Manages children with chronic gastrointestinal diseases.
- **Rheumatology Clinic**: Provides treatment and follow-up for children with chronic rheumatological conditions.
- **Endocrinology Clinic** (Friday): Offers growth hormone therapy for eligible patients and manages endocrine disorders such as precocious puberty, congenital adrenal hyperplasia, and hypothyroidism.
- **Palliative Care Clinic** (Thursday): Provides palliative services, including home oxygen concentrators and BiPap machines for patients in need.
- **Genetic Clinic** (Tuesday): Provides genetic testing, counselling, and preventive services for children with inherited conditions.
- **Regional Early Intervention Centre (REIC) & Autism Centre** (Behavioural Paediatrics Unit): Offers clinical, therapeutic, and rehabilitative services for children

with autism, developmental and behavioural disorders, and intellectual disabilities. Clinical psychologist, Developmental therapy, Occupational therapy, Physiotherapy, Speech and Language, Optometrist, Special Education Section.

- **Outreach OP Services:** Conducted weekly at Rural Health training Centres in Vakkom and Integrated Family Health Centre, Pangappara, extending paediatric care to the community.
- **District Residency Program:** Postgraduate trainees deliver paediatric care services at Taluk and General Hospitals across Trivandrum District, strengthening healthcare delivery at the peripheral level.

Operational Statistics

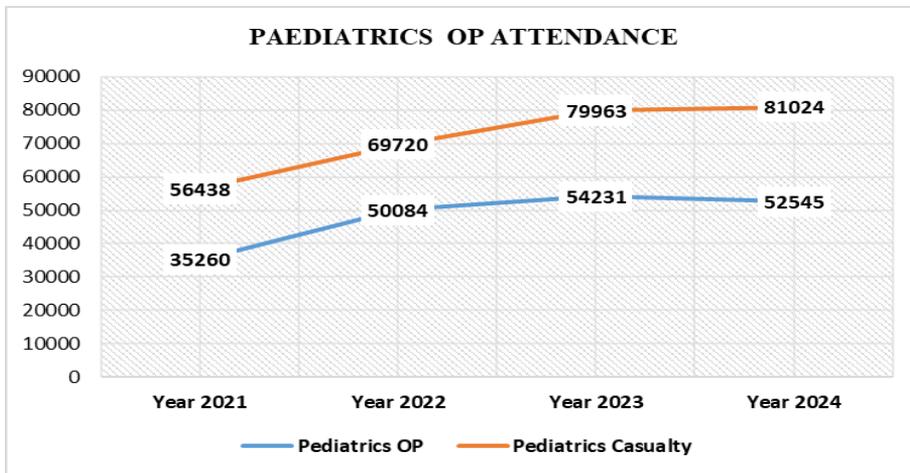


Figure 44. Paediatrics OP attendance.

Table 21. Specialty clinic OP in Paediatrics

Specialty Clinics in Paediatrics	Year 2021	Year 2022	Year 2023	Year 2024
Paediatric Endocrinology	949	1360	2390	2591
Paediatric Genetics	1179	1971	1894	1373

Paediatric Respiratory	552	692	1670	1643
Behavioral Paediatrics	2872	5041	7347	9232

3. 8. 3. 12. Physical Medicine and Rehabilitation (PMR)

The PMR department is located about 100 metres from the medical college main gate on the Medical College junction - Kumarapuram road adjacent to the medical college post office. The department offers both outpatient (OP) and inpatient (IP) rehabilitation. Neurological, Musculoskeletal and Rheumatological cases across paediatric to geriatric age groups form the bulk of cases attending here. The department offers comprehensive rehabilitation services including physiatry, rehab nursing, physiotherapy, occupational therapy, orthotics, prosthetics, social rehab etc. The department conducts specific clinics for cerebral palsy, sports injury, obesity, stroke, and weekly outreach clinics at Integrated family health centre Pangappara. Also, it provides a 3-year post graduation course in PMR.

Regional Artificial Limb Fitting Centre (RALFC): The Medical College is having a dedicated Regional Artificial Limb Fitting Centre established in 1975 under the PMR department focussing on amputee rehabilitation, artificial limb fitting, prosthetics, and orthotics.

Equipment & Facilities

Available Instruments include CMG Machine, EMG/NCS/EP Machine, USG Machine, Gait Lab, C Arm Machine, Centrifuge, Foot Pressure Analysis Machine

Clinical Services

Occupational therapy Section, Physiotherapy Section, Speech and Language Section, Prosthetic and Orthotic Section, EMG/NCV Lab, Urodynamics Lab, Ultrasound/Doppler, Gait Lab, Cerebral Palsy clinic, Sports Rehabilitation, Disability Assessment Clinic



Figure 45. OP attendance of PMR department.

3. 8. 3. 13. Psychiatry

The Department of Psychiatry at Government Medical College Thiruvananthapuram is one of the leading centres for mental health care, training, and research in Kerala. The department offers outpatient services on all days and provides 24×7 emergency psychiatric consultation, ensuring continuous and comprehensive patient care. As an academic centre, the department has one of the highest postgraduate training capacities in the state, providing training to MD Psychiatry, MBBS, BSc and MSc Nursing and other allied health trainees. The department runs a wide range of speciality services, including a Suicide Prevention Clinic, Geriatric Psychiatry Clinic, Child and Adolescent Psychiatry Clinic, and Perinatal Psychiatry Clinic. It also has dedicated facilities for De-addiction Services, with a separate OP and an independent building for addiction treatment.

Nodal Centre for the Addiction Treatment Facility (ATF)-Recently, the Ministry of Social Justice and Empowerment, Government of India, selected the psychiatry department as a Nodal Centre for the Addiction Treatment Facility (ATF) by strengthening its capacity for evidence-based addiction management. One clinical unit of the department functions at the Mental Health Centre, Thiruvananthapuram, where we actively contribute to the rehabilitation of patients with chronic psychiatric conditions, helping them reintegrate into the community. The Department also conducts Disability Assessment Boards in the Medical College to assist eligible patients in obtaining disability certificates, ensuring access to government benefits

and social support. In addition, various medico-legal boards mandated by the Honourable Courts are regularly conducted by the department, providing expert psychiatric opinions and supporting the judicial system in complex forensic matters. The department actively conducts training programmes, awareness classes, and community outreach initiatives, promoting mental health literacy among healthcare workers and the public.

Equipment & Facilities

ECT Machines, Equipment for Psychological evaluation, TDCS.

Clinical Services

Modified ECT, TDCS, Psychological & IQ Testing/Disability Assessment, Medico-Legal Services (MACT BOARD, Disability board, Legal-Aid, Care & stay of Acute (Emergency) cases, Chronic Psychiatry care facility/Rehabilitation, Psychological assessments, Psychotherapy, Occupational therapy, Community based psychiatry clinics- Integrated Family Health Centre (IFHC) Pangappara.

Specialty Clinics

Neuro-psychiatry clinic/Geriatric Health/Geriatric Psychiatry, Child and Adolescent Psychiatric Clinic, Deaddiction, Marital and Psychosexual Clinic, Suicide Prevention Clinic, Psychomotor Clinic.

Operational Statistics



Figure 46. Psychiatry OP attendance

3. 8. 3. 14. Radiodiagnosis

The Department of Radiology at Government Medical College, Thiruvananthapuram, is a cornerstone of diagnostic and imaging services, offering advanced radiological care, education, and research. The department is equipped with modern imaging modalities including digital X-ray, ultrasound, CT, MRI, and mammography, catering to both routine and emergency diagnostics. It also offers minimally invasive image-guided procedures, such as biopsies, drainages, and vascular interventions, enhancing patient outcomes with reduced recovery times. The department trains undergraduate MBBS students, postgraduate MD Radiodiagnosis residents, Diploma in Radiodiagnosis & Radiotherapy Technology (DRRT), integrating clinical exposure with academic rigor. Postgraduate teaching started in 1976. Currently the department trains 9 postgraduates per year. Radiology at GMCT plays a pivotal role in multidisciplinary case discussions, cancer board reviews, and trauma care, ensuring comprehensive patient management.

Equipment & Facilities

X-ray machine, CT scan, MRI scan, USG with colour doppler, mammography, DSA.

Clinical Services

Barium upper GI and lower GI studies, HSG, Silography, urethrogram, fistulography, MCUG, Doppler studies, USG guided procedures, CT brain, head & neck, abdomen, CT enterography, urography, CT contrast enema, CT guided FNAC, Biopsy, MRI brain, spine, MR urography, MR cholangiopancreatography, mammography, angiography.

Operational Statistics of radiodiagnosis department is attached as Annexure-2

3. 8. 3. 15. Radiotherapy

GMC Thiruvananthapuram has a well-established radiotherapy department providing advanced radiation therapy for cancer treatment, focusing on safe and effective care to improve patient outcomes and quality of life. Offers specialized care for cancer patients, including diagnosis, treatment, and supportive therapies, with a focus on personalized and compassionate oncology care. The department has advanced equipments including linear accelerators (LINAC) for precise cancer treatment.

Equipment & Facilities

Major equipment include Water Phantom, CRO tube, Densitometer, Pocket dosimeter, Secondary standard dosimeter, Electrometer.

- *Equipment for Teletherapy:* Linear accelerator treatment unit, Theatron Equinox 80 machine, Record and verification system, IMRT and IGRT using Linear accelerator treatment unit, Linear accelerator.
- *Equipment for Brachytherapy:* HDR Remote After loading Brachytherapy machine -For Intracavitary, For Interstitial, For surface moulds, For Ophthalmic applications, For facilities for pre-operative Radiotherapy -available.
- *Equipment for Treatment Planning:* Eclipse treatment planning system, Somavision contouring stations, Aria network systems, Server;
- *Facility for patient immobilization:* Complete set of POL and or fit immobilisation device present; Facility for casting individualized shielding blocks
- *Facility for tissue compensation:* Bolus and Super flap available; Equipment for department of medical physics
- *Facilities for Dosimetry Equipment:* All dosimetric equipment device available, Daily QA devices, RFAI Farmer chamber, Parallel plate chamber, Solid state detector, Electrometer Thermometer and Barometer.
- *Facilities for Radiation Monitoring:* Pressurised Ion chamber based survey meter, GM survey meter, Pockel dosimeter, TLDs for radiation professionals.
- *Facilities for Radiation Protection:* Security plan and all lay outs as per AERB rules implemented.

Clinical Services

Outpatient and Inpatient services, Day care chemotherapy, Radiotherapy- Two dimensional in Cobalt machine, Three dimensional conformal radiotherapy, Intensity modulated radiotherapy, Image guided Radiotherapy in Lincar accelerator machine, Chemotherapy and radiotherapy counselling.

Operational Statistics

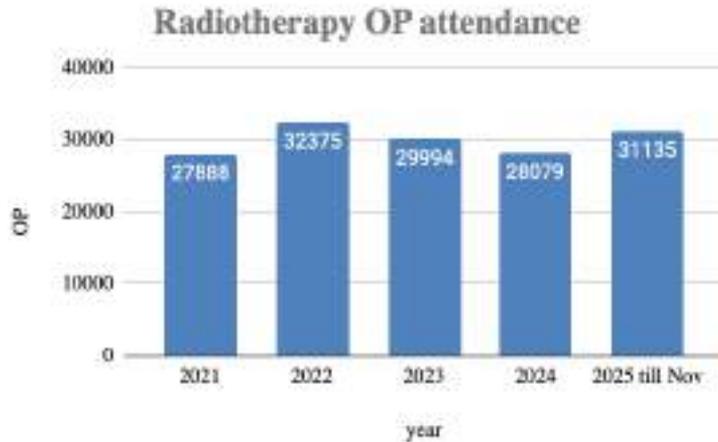


Figure 47 Radiotherapy OP attendance

3. 8. 3. 16. Respiratory Medicine

The Chest disease Hospital (CDH) at Pulayanarkotta, has functioned as the operational base for the Department of Respiratory Medicine of the Government Medical College Hospital, Thiruvananthapuram, structured into three distinct units. The department manages a total of 211 beds at CDH, providing a full spectrum of inpatient and out-patient services. It includes a specialised ward for infectious, non-infectious lung diseases, drug sensitive and drug-resistant TB cases, and a 10 bedded semi-ICU. It combines high-level teaching with advanced comprehensive clinical care. The centre also is the referral centre to RCC and SCTIMST for pulmonary diseases mainly Cancer related and lung diseases with neurological associations.

Nodal Centre for Drug-Resistant TB: The hospital also serves as the Nodal Centre for Drug-Resistant TB, with dedicated wards for both drug-sensitive and resistant TB cases. Its comprehensive service portfolio includes specialized clinics (SWAS airway disease clinics, Pulmonary Rehabilitation clinics on all days, and weekly ILD clinics on Thursday). It also has state of the art diagnostics Advanced procedures are performed on Mondays.

Equipment & Facilities

Resuscitation kit, video bronchoscope, EBUS, USG, Argon plasma coagulation, Thoracoscopy, impulse oscillometry, DILO, CPET, PFT equipment, Lung Ultrasound and Ultrasound guided Lung Biopsies, Pigtail insertions and advanced diagnostic and therapeutic interventions such as Flexible and Portable Bronchoscopy, Rigid and Semirigid Thoracoscopy, Electrocautery, Argon Plasma Coagulation, Cryotherapy, Foreign body removal and Advanced lung cancer detection equipment like Radial and Linear EBUS.

Clinical Services

Intensive care services: respiratory ICU, OP services: respiratory rehabilitation clinic, asthma clinic, bronchoscopy clinic, Thoracoscopy, EBUS staging for oncology and ultrasound clinic. Other services: bronchoscopy, physiotherapy section, PFT test and DLCO, Blood gas analysis, Aerosol therapy, MDR TB treatment, FNAC-pleura and lung, EBUS, Ultrasound, APC.

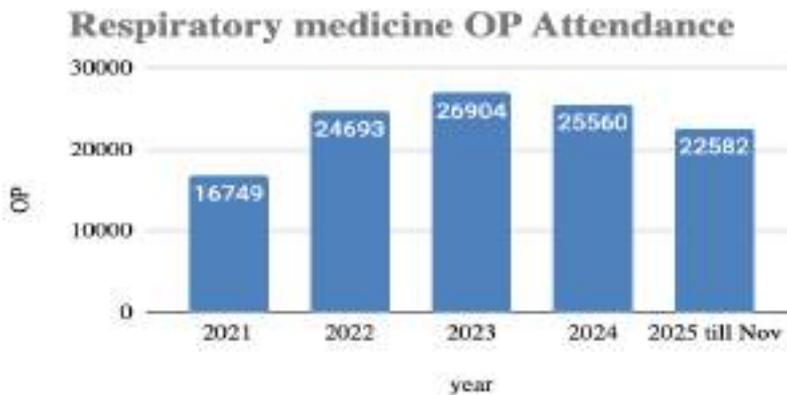


Figure 48. Respiratory Medicine OP statistics

3. 8. 3. 17. Transfusion Medicine

The Department of Transfusion Medicine, GMC Thiruvananthapuram, functions as a state-level apex centre providing comprehensive 24×7 transfusion services. As the State Nodal Centre, it integrates automated immuno haematology systems, ELISA/CLIA platforms, molecular genotyping, and real-time coagulation assessment. The department ensures safe and timely transfusion support across trauma care, obstetrics, Paediatrics, hematology,

oncology, liver transplantation, and bone marrow transplantation. It houses specialised units including the Molecular Lab, Therapeutic Unit, Quality Control Lab, and an extensive Rare Donor Registry. The department actively participates in Hemovigilance and EQUAS, maintains strict quality control processes, and follows National Plasma Policy guidelines.

Nodal Centre for rare blood group registry is functioning in the transfusion medicine department with the purpose of registering donors with rare blood groups, so that patients needing rare blood groups are connected with donors in medical emergencies.

Equipment & Facilities

The following facilities are available for 24*7: Blood collection; component preparation & storage; issue of PRC, FFP, platelets, leukoreduced & apheresis components; emergency & elective transfusion support.

Fully automated Immunohematology analyser, automated ELISA, ABO Genotyping in Molecular Lab, New Refrigerated Centrifuge, CLIA machine on reagent rental, ELISA for TTD screening, Automated Coagulation Analyser Type A for QC testing of fresh frozen plasma, Bacterial culture system for the Quality control of blood, PCR and gel doc, deep freezer, Apheresis machine, Automated coagulometer.

- *Therapeutic unit:* Autologous Platelet rich plasma transfusion to dental, orthopedic, dermatology and other specialities, Point of care testing-ROTEM, Leukoreduction of PRCs and Platelets both lab filters and inline filters, Rare donor registry, Automated coagulation lab for Quality Control of plasma products, Research and training programme as research centre
- *Quality control lab:* Surveillance Research Lab which sends samples to various Blood Centres for evaluation and helps in QC of individual blood banks.
- *Bulk transfer:* Bulk transfer of Surplus of blood and blood components exchanged in bulk, if any, between both RCC blood bank and State nodal blood centre, The department follows National Plasma Policy: The exchange of surplus plasma as per NBTC guidelines.

Clinical Services

Blood Collection, Blood component preparation and storage, Issue of appropriate component such as Packed red cells, fresh frozen plasma, platelet concentrate, leukoreduced PRCs and Platelets, Apheretic blood components)after proper laboratory testings, antibody screening, identification and phenotyping and resolution of blood grouping discrepancies and antibody titration in the advanced immunohematology lab, ensuring standard care for those patients suffering from platelet refractoriness, multiple platelet transfusions and alloimmunisation etc. Special investigations like Indirect coombs and direct coombs test D^u testing.

Transfusion support in Emergency and elective situations to casualty, trauma care and emergency medicine, General surgery and medical specialities, Obstetrics and gynaecology, Paediatrics, neonatology and others, Special groups in Hematology like Thalassemia, Sickle cell anaemia and haemophilia, started steps for 11 transfusion support in Liver transplantation and Bone Marrow Transplantation. Enrolled in the Hemovigilance programme

Operational Statistics

Average number of blood units utilized by various departments in a day is 210 in the year 2024

Table 22. Cross matching and Blood components issued by transfusion Medicine

Parameter	Year 2022	Year 2023	Year 2024
Blood units + components issued	65488	74677	74741
Blood units Collected	27369	29498	30096
Total cross marching done	66937	75498	75855

Special Initiatives

Organising programmes on special occasions like June 14 (world blood donor day) and October 1(blood donation day) to honour blood donors and organisations.

3. 8. 4 Clinical Super specialty

3. 8. 4. 1 Cardiology

The Department of Cardiology at Government Medical College, Thiruvananthapuram, established in 1972, is the first cardiology department in the public sector in Kerala. Since its inception, the department has been a pioneer in delivering advanced cardiac care, offering comprehensive outpatient, inpatient, and 24×7 consultation services for all major cardiac conditions. Over the decades, the department has consistently achieved several milestones, including Kerala's first coronary angioplasty (1998), first primary angioplasty (1999), first BMV (1999), and the first percutaneous ASD closure (2001) in government sector hospitals. It has also been at the forefront of electrophysiological procedures, 24-hour primary angioplasty services, and most recently, advanced structural interventions such as TAVR (2023) and Trans-carotid TAVR (2024). In 2025, it became the first among Kerala Government Medical College Hospitals to implant a leadless pacemaker. With continuous advancements in patient care, clinical training, and interventional cardiology, the department remains at the forefront of cardiovascular medicine in the region with the vision to grow into a centre of excellence.

Equipment & Facilities

CATH LABS, TMTLAB, ECHO LAB, HOLTERLAB, ICCU with Ventilators integrated with humidifier and Multiparameter (8parameters) monitor, Ultrasound machine color Doppler, echocardiogram facility with 3 probes (curvilinear, linear, and phased array), Defibrillator, Patient warming device, Air wav/Crash, Oxygen cylinder (B-Epe) with pressure regulator, Patient transport trolley with 3 parameters monitor, Arterial Blood Gas Analyzer, Facility for bedside Renal Replacement Therapy, Portable Xray Machine, Temporary Pacemaker.

Clinical Services

- | | |
|--|---------------------------------------|
| 1) Outpatient clinic | 5) Treadmill testing |
| 2) Inpatient care | 6) Stress echocardiography |
| 3) Cardiology consultation for other departments | 7) Holter monitoring |
| 4) Echocardiogram | 8) Coronary angiogram and angioplasty |

9) Structural cardiac interventions – percutaneous closure of ASD, VSD, PDA, trans- cutaneous aortic valve replacement (TAVR) and percutaneous para valvular leak closure

10) Cardiac pacemaker implantation
 11) Cardiac resynchronization therapy
 12) Implantable cardioverter-defibrillator implantation.

Specialty Clinics

Pacing clinic, Arrhythmia clinic, Heart failure clinic, Combined clinic with CTVS department, Paediatric Cardiology Clinic.

Operational Statistics

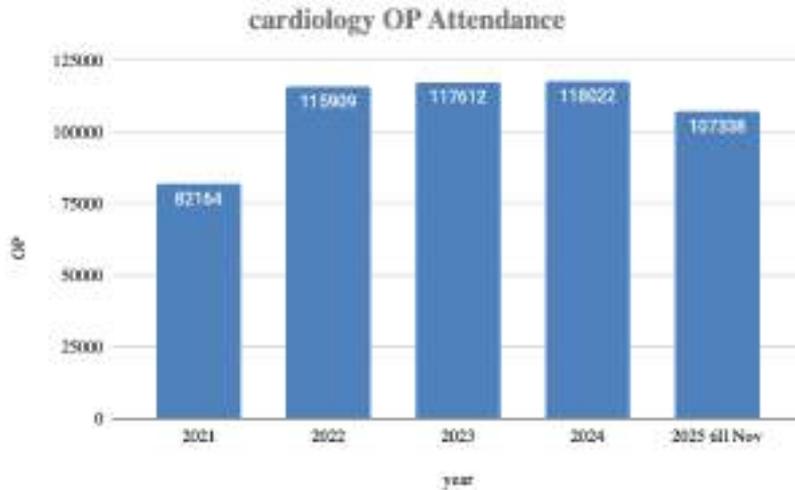


Figure 49. Cardiology OP attendance

Table 23: Speciality clinics run by cardiology and average number of patients attending.

Specialty clinics in Cardiology	Average OP attendance day
Pacing clinic	12
Arrhythmia clinic	22
Heart failure clinic	40
Combined clinic with CTVS	8
Paediatric cardiology	16

3. 8. 4. 2 Critical Care Medicine

The Department of Critical Care Medicine at GMC Thiruvananthapuram, functions as a Multidisciplinary Intensive Care Unit (MDICU) providing comprehensive care to critically ill patients. It integrates the expertise of multiple clinical disciplines to deliver round-the-clock, protocol-based intensive care services. The department offers a wide range of services including advanced hemodynamic monitoring, invasive and non-invasive ventilation, renal replacement therapy, neurocritical care, infectious disease management, and emergency and trauma care. Critical care procedures such as central line insertion, airway management, tracheostomy, dialysis catheter placement, bronchoscopy, and thoracentesis are routinely performed following established safety standards. The MDICU is equipped with intensive care beds and isolation units designed for managing patients requiring high-acuity care.

The multidisciplinary team comprises qualified intensivists, residents, trained nursing staff, and allied health professionals ensuring optimal nurse-to-patient ratios and comprehensive support services, including physiotherapy, anesthesia technology, dialysis support, and biomedical maintenance. Each bed is integrated with state-of-the-art monitoring and life-

support equipment, including high-end ventilators, multiparameter monitors with central surveillance, defibrillators, ultrasound, echocardiography, point-of-care testing systems, and end-tidal CO₂ monitoring. These facilities enable continuous real-time assessment and rapid clinical decision-making. The department maintains strict adherence to quality assurance protocols through regular audits, morbidity and mortality reviews, and structured training programs aimed at enhancing staff competency and patient safety. Plans are underway to establish Extracorporeal Membrane Oxygenation (ECMO) services to further expand the department's advanced critical care capabilities. The department would play a major role in the critical care management of post-transplant patients and in infection prevention and control.

Equipment & Facilities

High-end Mechanical ventilators at each bedside, Multi-parameter patient monitors with central monitoring station, Defibrillators and pacing equipment, Point-of-care testing facilities, Ultrasonography, Echocardiography, ABG, End-tidal Carbon dioxide monitoring, Doppler, X-ray, -Surveillance: Fully camera-monitored for enhanced patient care and safety, Paediatric Intensive care facilities at SAT. GMC Tvm, 18 bed critical unit and 32 bed step down units, Equipped with 19 ventilators, bed side EEG machine, CRRT, hemodialysis, IAP certified Paediatric Intensive care teaching unit.

Clinical Services

- Advanced Hemodynamic Monitoring, Mechanical Ventilation (invasive and non-invasive) in Severe ARDS, Acute exacerbation of COPD Renal Replacement Therapy (RRT)
- Infectious Diseases Management
- Neurocritical care
- Emergency Response and Trauma Care

Critical Procedures: Central line insertion, Intubation, Percutaneous Tracheostomy, HD catheter insertion, Bronchoscopy, Difficult IV cannulation, Thoracocentesis, Pleurocentesis, Difficult Lumbar puncture.

Treatment achievements:

- a. 1st paediatric ECMO in a state government run medical College in the country.
- b. Survival of all 8 cases of amoebic meningoencephalitis.
- c. Advanced high-end treatment for most of the critical illnesses in children.

Operational Statistics

Around 1500 admissions per year.

3. 8. 4. 3 Cardiovascular and thoracic surgery.

The cardiovascular and thoracic surgery specializes in surgical treatment for heart, lung and chest conditions including complex heart bypasses, cardiac valve repairs and lung cancer surgery. The Department of Cardiothoracic and Vascular Surgery provides advanced surgical care to patients from southern Kerala and neighbouring regions. It functions with a multidisciplinary team to manage complex cardiac, vascular, and thoracic conditions. The department provides a wide spectrum of surgical services, including: Cardiac Surgery, Open heart surgeries such as Coronary Artery Bypass Grafting (CABG), Valve repair and replacement, Off-pump bypass surgery (beating heart surgery), Redo surgeries, Paediatric cardiac surgery including neonatal and infant procedures, Thoracic surgery (Open, VATS); Aortic aneurysm repair; Thoracoscopic (minimally invasive) surgery; Vascular procedures (Central, Peripheral) The department is led by experienced cardiothoracic surgeons and supported by dedicated anaesthesiologists, perfusionists and specialized nursing staff.

Equipment & Facilities

Heart Lung Machine, Defibrillators, ABG Machine, Anesthesia workstation, Electronic Surgical Unit with integrated vessel sealing system & Argon Plasma Coagulator, Single Chambered Pacemaker, Hypothermia Machine, Ventilators, Others- IABP, Echo, Doppler, Double chamber pacemaker.

Clinical Services

CABG, Valve replacements, Congenital Heart disease Repairs, Embolectomies, Surgeries on lungs, Arterial/venous grafts on abdominal/peripheral vessel.

Specialty Clinics

Coronary Surgery Clinic, Valve Surgery Clinic, Combined clinic with, Cardiology Department, Paediatric Cardiothoracic Surgery Clinic, Vascular Surgery clinic, Lung Surgery Clinic.

Operational Statistics



Figure 50. Cardiovascular and Thoracic Surgery department OP attendance

Table 24. Surgical procedure statistics

No. of surgeries	2022	2023	2024
Major surgeries	344	368	385
Minor surgeries	145	159	160

3. 8. 4. 4 Endocrinology

The Division of Endocrinology at Government Medical College, Thiruvananthapuram was initiated by Dr. Mathew Roy which was later expanded into a full-fledged Department of Endocrinology in 2012. The first batch of DM Endocrinology trainees was admitted in 2017, with an annual intake of two students. The Department of Endocrinology conducts outpatient clinics on Mondays and Wednesdays in the Super Speciality Block. In addition, a dedicated Paediatric and Adolescent Endocrinology clinic is held on Saturdays of the Medical

College OPD block. The department also runs a laboratory, where most endocrine investigations are performed under the supervision of the faculty of the Department of Endocrinology. Past and present DM trainees of the department have received multiple awards at national levels. The department is actively involved in various research projects and academic activities including ICMR projects.

Equipment & Facilities

Endo lab, Mindray BS-390 Adequate, Roche cobas-e 601 Adequate, ELISA reader and washer, Deep freezer, Deep freezer, , Cold Centrifuge, Fiske 210 Micro Osmometer Adequate, Mindra'r DC 60 USG, Biothesiometer, Weighing Scales, Dexa scanner, stadiometer, skin calipers, glucometer.

Clinical Services

Any Intensive care service provided by the department: High Dependency unit 4 beds. Lab services: Thyroid tests, 24 Hour Urine Protein, 24 Hour Urinary Cortisol, Oral Glucose tolerance test, Thyroid Scans, Bone density test, Dexamethasone suppression test, ATPO, TESTO, PROLACTIN, CORTISOL, PTH, VITAMIN D.

Specialty Clinics

Thyroid Clinic, Diabetes Clinic, Growth disorder Clinic, Adrenal disorder Clinic, Obesity Clinic, Pituitary Clinic, Diabetes in Pregnancy, Young Diabetes Clinic.



Figure 51. Endocrinology OP attendance

3. 8. 4. 5 Department of Medical Gastroenterology

The medical gastroenterology department provides a comprehensive range of specialized services, including: Complex Disease Management: Expert care for gastrointestinal and hepatobiliary conditions. Comprehensive Hepatology: Management of Cirrhosis, Portal Hypertension, ACLF, and Chronic Liver Disease. Metabolic & Inflammatory Care: MASLD evaluation and dedicated Inflammatory Bowel Disease (IBD) care with long-term follow-up, Advanced Endoscopy, GI Oncology, Transplant Support. The department serves as a major advanced endoscopy center, offering: Diagnostic Upper GI Endoscopy, Colonoscopy, Colonoscopic polypectomy, Endoscopic Retrograde Cholangiopancreatography (ERCP), Endoscopic Ultrasound (EUS), EUS-guided Fine Needle Aspiration / Biopsy, Variceal band ligation, Sclerotherapy, Achalasia dilatation, CRE balloon dilatation, Argon Plasma Coagulation, Esophageal and Duodenal Stenting, Percutaneous Endoscopic Gastrostomy (PEG) Placement. The department serves as one of the major hepatology centers in the state. The department also plays a vital supportive role in: Living Donor Liver Transplant Program, Pre-transplant optimization, Post-transplant clinical support. Apart from DM in Medical Gastroenterology, Diploma in Endoscopy Technology also conducted. Last year total Inpatient Admissions were 1,945 and a total of 70884 patients sought outpatient care from April 1st 2024 to March 31st 2025. . The department has a strong research ethos covering: Liver cirrhosis prognosis & ACLF outcomes, Portal hypertension and prognostic evaluation, MASLD disease burden and progression, Hepatocellular carcinoma outcomes and QoL, Inflammatory Bowel Disease and intestinal ultrasound research, Elastography-based liver disease evaluation, Severe alcoholic hepatitis research, ICMR national pancreatitis epidemiology, International hepatology trials, The department actively publishes research, presents scientific work and contributes to, policy-shaping scientific knowledge.

Equipment & Facilities

- | | |
|---|---|
| 1) 5 Bedded Ward (SSB Ward – 3) | 14) Endoscopic Ultrasound (EUS) System) |
| 2) Dedicated Endoscopy Unit | |
| 3) Fully functional Gastroenterology Laboratory | 15) Variceal Band Ligation Unit |
| 4) Ultrasound and elastography services | 16) Injection Sclerotherapy Equipment |
| 5) Seminar Hall and training facilities | 17) Argon Plasma Coagulation Unit |
| 6) Digital documentation and follow-up systems | 18) Balloon Dilatation System (CRE /Achalasia) |
| 7) Dedicated procedural suites | 19) Esophageal /Duodenal Stent Deployment System, |
| 8) Research support infrastructure | 20) Percutaneous Endoscopic Gastrostomy (PEG) Kit |
| 9) Faculty rooms and resident work stations | 21) Ultrasound Machine with Doppler |
| 10) OP Facility (Computerized) and IP facility | 22) Liver Elastography Facility |
| 11) Video Upper GI Endoscopy System | 23) Fluoroscopy Support for ERCP |
| 12) Video Colonoscopy System | 24) GI Endoscopy Tower |
| 13) Side Viewing Duodenoscope (ERCP Scope) | 25) Endoscope Reprocessing & Disinfection Unit |
| | 26) Multiparameter Patient Monitors |
| | 27) Emergency Crash Cart |

Clinical Services

The department provides comprehensive, protocol-based, high-quality patient care services including: High-volume Outpatient Gastroenterology Services, Inpatient care including chronic and critically ill gastroenterology patients, Dedicated hepatology care services, Pancreatic disease evaluation and treatment, Biliary tract disease management, GI bleeding emergency stabilization and treatment, Long-term evaluation and surveillance of chronic liver disease, Inflammatory Bowel Disease management, Gastrointestinal oncology collaborative management, Nutrition and metabolic assessment support,

Advanced Endoscopy and Interventional Gastroenterology

The department serves as a major advanced endoscopy center, offering: Diagnostic Upper GI Endoscopy Colonoscopy, Colonoscopic polypectomy, Endoscopic Retrograde Cholangiopancreatography (ERCP), Endoscopic Ultrasound (EUS), EUS-guided Fine Needle Aspiration / Biopsy, Variceal band ligation, Sclerotherapy, Achalasia dilatation, CRE balloon dilatation, Argon Plasma Coagulation, Oesophageal and Duodenal Stenting, Percutaneous Endoscopic Gastrostomy (PEG) Placement, All procedures are carried out under strict safety guidelines and international standard care protocols ensuring maximum patient safety and procedural efficiency.

Advanced Hepatology and Transplant Support

The department serves as one of the major hepatology centers in the state providing: Care for cirrhosis and portal hypertension, Management of acute and chronic liver failure, Hepatocellular carcinoma evaluation and ongoing management, Non-invasive fibrosis and disease progression monitoring, Advanced supportive care for complex liver disease, Living Donor Liver Transplant Program, Pre-transplant optimization, Post-transplant clinical support, Multidisciplinary transplant coordination and review, A landmark achievement includes the successful execution of the third Living Donor Liver Transplant in December 2024, in collaboration with the Surgical Gastroenterology team, marking a significant milestone in public sector liver transplant supportive care.

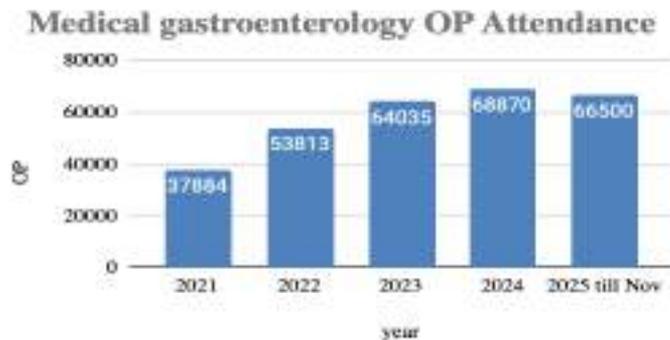


Figure 52. Medical Gastroenterology OP attendance

3. 8. 4. 6 Surgical Gastroenterology

The Department of Surgical Gastroenterology is a pioneering institution, established in 1975, the first department in India to focus exclusively on complex Gastroenterology care services for people of southern Kerala and some parts of Tamil Nadu. The department is offering M. Ch. courses and expert care utilizing both open and laparoscopic techniques, and is known for training many leading surgeons in India. It provides comprehensive treatment for esophageal, Gastro Intestinal, hepato-pancreatico-biliary, colorectal, and other related diseases with state-of-the-art facilities.

Equipment and facilities

Upper GI endoscopy set, Lower GI endoscopy set, Laparoscopy equipment set, Ultrasonic Dessector/ Coagulator, Vessel Sealing Equipment. Instruments for open surgery, Instruments for liver transplant surgery, Ultrasonography machine with Doppler, Laparoscopy Trainers.

Clinical services

Upper GI Endoscopy, Lower GI Endoscopy, USG guided liver biopsy, CT guided liver biopsy, MRCP, Transjugular Liver Biopsy, ICU services, Opcn Cholecystectomy, Gastrectomy, Colectomy, Excision of small intestine and Reconstructive Surgery, Abdomino perineal Resection/Anterior Resection, Esophagectomy, Whipples Surgery (Pancreatic excision), Liver Resection and Transplant. Minimally Invasive Surgeries: Cholecystectomy, Gastrectomy, Oesophagectomy, Colectomy, Excision of small intestine and Reconstructive Surgery, Abdomino perineal Resection/Anterior Resection, Whipples Surgery, Liver Resection.

Specialty Clinics

Liver Clinic, Pancreas clinic, Stoma Care Clinic.

Operational Statistics

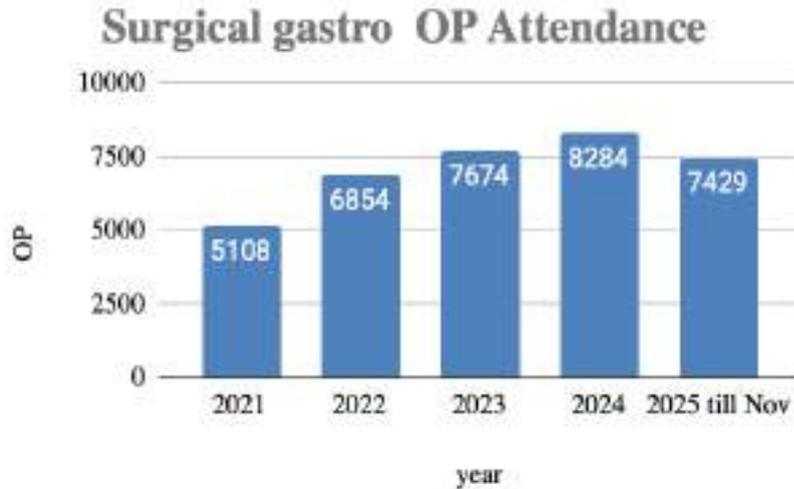


Figure 53. Surgical Gastroenterology outpatient attendance

Table 25: Surgical Gastroenterology workload

Name of the surgery- Surgical Gastroenterology	2022	2023	2024
Open			
Cholecystectomy	4	5	5
Gastrectomy	7	18	16
Colectomy	24	21	16
Small intestine excision and reconstruction	4/47	11/54	5/56
APR	24	20	27

Esophagectomy	1	1	5
Whipple's surgery	24	27	39
Liver resection and transplant	6/1	8/1	12/1
Minimally invasive surgeries			
Cholecystectomy	50	54	80
Esophagectomy	0	0	1
Colectomy	2	3	7
APR	0	4	8
Liver resection	0	1	3

3. 8. 4. 7 Nephrology

The Department of Nephrology, Government Medical College Thiruvananthapuram started offering nephrology services as early as 1981. It is a major tertiary-care centre offering comprehensive renal care with outpatient clinics on Tuesday, Thursday and Friday, providing detailed evaluation and long-term management for both Acute Kidney Injury (AKI) and chronic kidney disease (CKD) patients. The department manages dedicated inpatient beds, delivers 24×7 nephrology consultation services across the hospital, and provides emergency care for AKI, CKD complications, dialysis emergencies and post-transplant issues. It operates one of the largest government-run dialysis programs in Kerala with more than 33 haemodialysis machines offering maintenance HD, acute HD, SLED/SLED-f, Continuous Renal Replacement Therapy (CRRT), plasmapheresis, hemoperfusion, and ICU-based renal

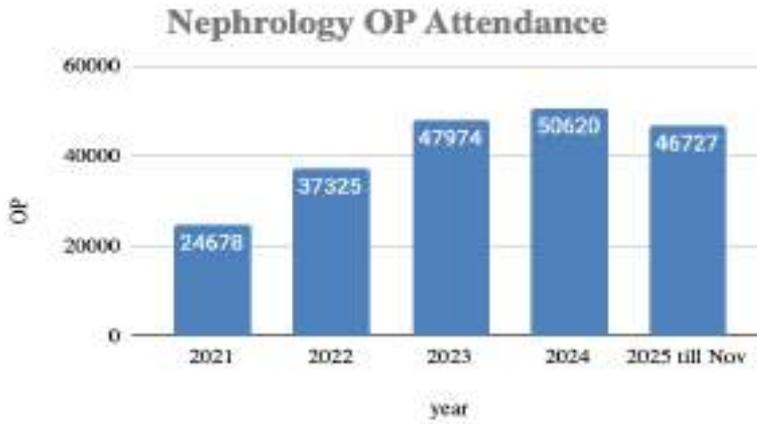
support. The department performs both live donor and deceased donor renal transplantation and provides specialized long-term follow-up through a dedicated Transplant OPD. The department conducts the prestigious DM Nephrology program and also offers structured training for BSc Dialysis Technology (BSc DT) students as well as the DDT (Dialysis Technician Training) course, equipping trainees with hands-on skills in haemodialysis, acute dialysis, CRRT and dialysis unit management. Department organises CME s in various fields of nephrology and organises various training sessions. With its high clinical volume, strong academic culture and commitment to equitable public health renal care, the Department of nephrology is aiming to establish Intervention nephrology, Paired kidney exchange Renal transplantation, dedicated Glomerular Disease clinic, Onconephrology and advanced Transplant immunology lab in the near future.

Equipment & Facilities

Hemodialysis machine, CRRT machine, portable RO plant, Coagulation analyser, Electronic weighing scale platform type, Syringe Pump, Multiparameter monitor, Ventilator, Defibrillator, Portable Ultrasound machine, ABG machine, Bicarb mixer, HFNC, Infusion pump, DVT Pump, Patient Warmer. A wide range of procedures are performed including AV fistula creation, permcath insertion, AVF thrombolysis and salvage, CAPD catheter insertion, acute Peritoneal Dialysis catheter placement, temporary dialysis catheter placement, ultrasound-guided renal biopsy, and AVF mapping.

Clinical Services

OPD, IP, ICU, Liver related renal transplant, Deceased donor renal transplant, Intervention procedures -renal biopsy, temporary catheter insertion, permanent catheter insertion, AVF acute thrombolysis, CRRT, plasmapheresis, Hemoperfusion, PLEX, Hemodialysis and peritoneal dialysis

Operational Statistics**Figure 54. Nephrology OP attendance****Details of procedures done in nephrology department****Table 26: Procedures in nephrology**

Name of the Procedure done in Nephrology	2022	2023	2024
Temporary haemodialysis catheter insertion	3856	3628	3548
Permanent haemodialysis catheter insertion	45	48	42
CAPD catheter insertion	36	32	44
Renal biopsy	320	300	540
AV fistula thrombolysis	0	5	10
CRRT	11	8	10
PLEX	368	411	424

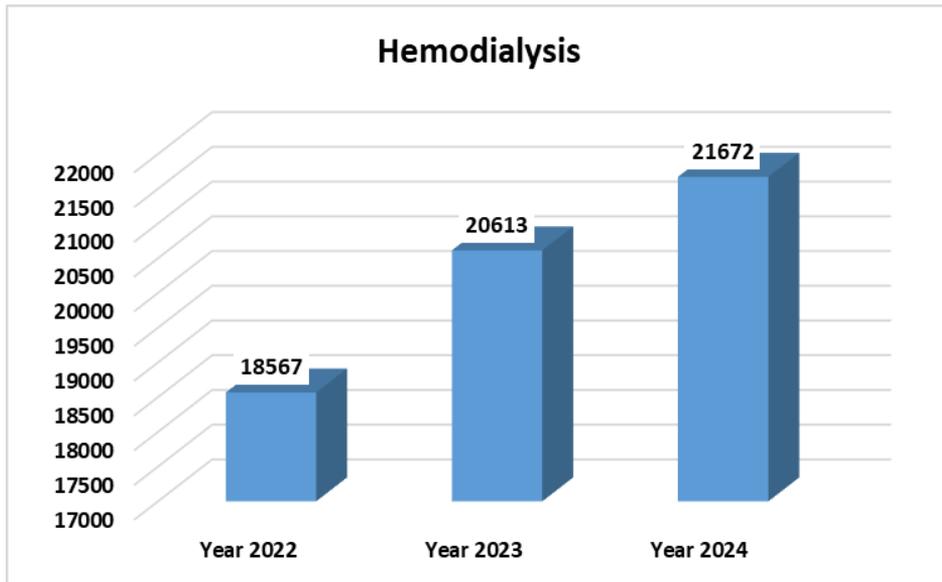


Figure 55. Number of dialysis done

Major surgeries done in Nephrology

Table 27.: Major surgery and procedure workload related Nephrology

Name of the major surgery	2022	2023	2024
Liver related renal transplant	13	14	15
Diseased donor renal transplant	05	07	03
Continuous ambulatory peritoneal dialysis	10	12	05

3. 8. 4. 8 Medical Neurology

The department of Neurology started in 2001. Currently 5 DM Neurology Senior Residents 15 junior residents, 12 Diploma in Neuro Technology students. are being trained by our department. The department has 16 bedded MICU, 14 bedded Stroke ICU, 1 VIP room 2 step down rooms, Neuro CT and Neuro Cath lab and 40 bedded ward. Monday, Thursday and

Saturday are the OP days in a week. With 500-700 patient attendance. The department is fully organised for doing EEG, Sleep Study, Nerve Conduction Study, VEP, BERA and EMG. The department of neurology provides the following services.

Stroke ICU- Stroke ICU is an essential component in acute stroke care which can very well reduce mortality and morbidity in patients. Setting up a stroke ICU near ER could reduce the delay in IV thrombolysis and mechanical thrombectomy.

Stroke Cath Lab: Comprehensive Stroke Centre (CSC), the first of its kind in the public sector in Kerala, provides state-of-the-art care to the common person suffering from acute stroke. First Mechanical Thrombectomy done by Neurology Department in Government Sector Hospital. Conducting a SNIF Fellowship in Neuro-intervention In Neurology Department we are providing a 24*7 stroke Helpline service to the Public and there is a Helpline Number which is already circulated among the Public for communication.

Equipment & Facilities

- Ventilator, plasmapheresis machine, defibrillator, pulse oximeter, ultrasound machine, spirometer, holter monitor system portable x-ray machine, color doppler, central monitoring system, DVT pump physiotherapy equipment for rehabilitation radiological vascular angiography system including DSA, ETO sterilized sealing machine, portable ultrasound machine, anaesthesia workstation, CT machine, transcranial doppler, EEG machine, EMG machine.
- Comprehensive Stroke centre- department of Neurology has four components: Stroke ICU, Stroke Cath, Lab, 128 slices CT angiogram, step-down rooms, and VIP room. CT angiogram has been functional since April 2021.

Clinical Services

Intensive care services, MICU, Stroke ICU, OP services, EEG, NCV, EMG, Carotid doppler, CT/MRI, MRA, CTA, Neuro pathological investigation.

Specialty Clinics

Stroke OP, Botox Clinic, Stroke Clinic, Services including mechanical thrombectomy for acute ischemic stroke patients, carotid stenting for carotid artery stenosis, diagnostic DSA, and

procedures for AVM and aneurysms are being provided through this Cath lab. Comprehensive Stroke Centre has stroke ICU, stroke Cath lab, step-down rooms and VIP room.

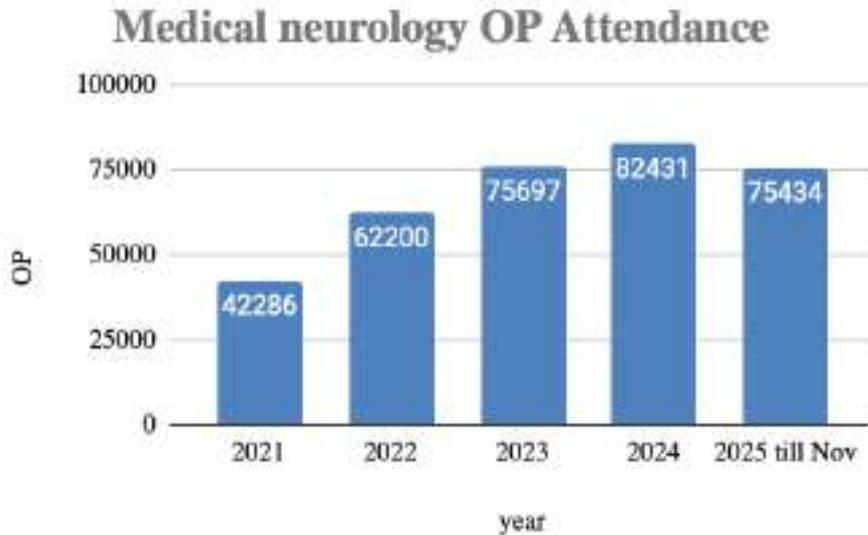


Figure 56. Medical Neurology Op Attendance

3. 8. 4. 9 Neurosurgery

The Department of Neurosurgery is the largest referral centre for neurotrauma and complex neurosurgical cases in South Kerala and parts of southern Tamil Nadu. The department provides high-quality neurosurgical care to all patients. The neurosurgical team possesses extensive expertise in neurotrauma, neurovascular surgery, neuro-oncology, advanced skull base surgery, complex spine procedures, and minimally invasive as well as endoscopic neurosurgery. A specialised neuro physiotherapy and rehabilitation team also supports the department. Outpatient services are available three days a week, on Tuesdays, Wednesdays, and Fridays. The department also provides 24-hour emergency neurosurgical services on all days. Inpatient wards are located in the Super Speciality Block, Old Hospital Block, and SAT Hospital, which caters exclusively to paediatric neurosurgery patients. The Super Speciality Block houses a six-bedded Intensive Care Unit and a four-bedded High Dependency Unit. The Multi-Speciality Block contains an 18-bedded Intensive Care Unit dedicated to neurotrauma

patients. All intensive care units are equipped with an adequate number of ventilators and advanced monitoring systems.

Equipment & Facilities

- Skill lab, Operating Microscope, Electric drill, Surgical Instrument, Operation instruments for Spinal Surgery-Operating Microscope, Cranial Endoscopy Set, Skull Base Endoscopy Set, Brain Surgery, Micro Instruments, Gamma Knife, Ultrasonic Aspirator, Spinal Endoscopy Set, Electric drill, Available Working Medtronic, Stereotactic System, Spinal Retractor System, Nerve Monitoring System, Diafermy unit, C-arm, Neuro Radiology equipments, Ultrasonography machine for Carotid Doppler.
- The department is equipped with state-of-the-art neurosurgical infrastructure, including new-generation operating microscopes, high-speed surgical drills, advanced endoscopic systems, ultrasonic surgical aspirators, the latest neuro navigation systems, sophisticated microsurgical instruments, ventilators, and neuromonitoring devices
- The department offers advanced care in neurotrauma, neurovascular surgery, skull base surgery, neuro-oncosurgery, complex spine surgery, minimally invasive and endoscopic neurosurgery, interventional neurology, and neurorehabilitation.

Clinical Services

- Decompressive Craniotomy, Burr hole and Hematoma Evacuation, Craniotomy and Hematoma Evacuation, Spinal Instrumentation-Cervical and Lumbar Trans nasal Surgery, Craniotomy and Tumor Decompression, Posterior Fossa Tumours, Minimal Invasive Spine Surgery, Cerebro- Vascular Neurosurgery
- Intensive care service: Trauma ICU, Elective ICU, Electrophysiology lab-EEG, NCV
- Interventional neurosurgery, Rehabilitation, and counselling

Specialty Clinics

Paediatric Neuro Surgery, Spine clinic, Vascular Neuro Surgery, Skull Base Surgery, Trauma/Miscellaneous

Operational Statistics



Figure 57. Neurosurgery OP attendance

3. 8. 4. 10 Nuclear Medicine

The Department of Nuclear Medicine at Government Medical College, Thiruvananthapuram, plays a pivotal role in advanced diagnostic and therapeutic services, integrating cutting-edge technology with patient-centered care. Established as part of Kerala's premier medical institution in 1993. Dr. P Ramachandran Nair was the first HOD. The department is equipped to handle a wide range of nuclear imaging and radionuclide therapies. It caters to both outpatient and inpatient services. The department supports clinical specialties by offering functional imaging techniques such as SPECT, and thyroid scans, which are crucial in oncology, cardiology, nephrology, and endocrinology. SPECT -CT scanner became operational in the Dept of Nuclear Medicine, Government Medical College Thiruvananthapuram from 16th December 2024.

Clinical Services

The routinely performed scans are Tc99m MDP Bone scan, Tc99m Pertechnetate thyroid scan, Tc99m DTPA scan, Tc99m DMSA scan, Tc99m EC renogram, Tc99m MIBI Parathyroid imaging, Tc99m MIBI Myocardial Perfusion imaging, Scan for Meckels diverticulum,

Hepatobiliary Scintigraphy, GI bleed study, GE reflux study (milk scan) Lymphoscintigraphy and I-131 Whole body Radio- Iodine scans. Radioactive Iodine Treatments are also regularly done (Radio-iodine (I-131) Ablation for thyroid cancer patients (Low dose therapy), Radio-iodine (I-131) treatment for Hyperthyroidism is also performed with prior appointments).

Operational Statistics

- Total number of therapies given-64
- Low dose therapy-48
- Toxic therapy-16

3. 8. 4. 11 Neonatology

The Department of Neonatology in Government Medical college, Thiruvananthapuram was created in 2015 (G. O(Rt)No. 3014/2015/H& FWD, dated Thiruvananthapuram, 17. 09. 2015). There are on an average 7000- 8000 deliveries per year, the majority of which are high risk. The Department has acquired all state-of-the-art equipment including Incubators, High Frequency Ventilators, Inhaled nitric Oxide system, Laminar Flow for TPN preparation, and an EEG machine. There are regular bedside X-rays, blood gases analysis and point of care USS and Echocardiograms being performed.

There is a dedicated predischarge Screening area called “*Shalabam*” with separate trained staff. Comprehensive screening including Visual birth defect screening, Pulse oximetry screening for critical congenital heart disease, Universal Hearing Screening and Newborn Metabolic Screening is being done.

Equipment & Facilities

- | | |
|--|---|
| 1) 28 bedded Level 3 Inborn NICU | 7) Inhaled nitric Oxide system |
| 2) 14 bedded level 3 out born NICU | 8) Laminar Flow for TPN preparation |
| 3) 10 bedded level 2 SNCU | 9) EEG machine. regular bedside X-rays |
| 4) 5 bedded triage area with 28 mother and baby beds | 10) blood gases analysis, point of care USS |
| 5) Incubators | 11) Echocardiographs. |
| 6) High Frequency Ventilators | |

Clinical Services

Visual birth defect screening, Pulse oximetry screening for critical congenital heart disease, Universal Hearing Screening, Newborn Metabolic Screening, Detailed Genetic workup of sick neonates, Pre and post-operative management of complex neonatal surgeries, High frequency ventilation, inhaled nitric oxide therapy, LASER and intravitreal Anti VEGF injection for Retinopathy of prematurity. Management of babies with Neonatal cardiac interventional procedures and cardiothoracic surgery, Therapeutic Hypothermia for Hypoxic Ischemic encephalopathy.

Special Initiatives

1. New developments include setting up of a new Mother and Newborn care unit and Comprehensive Lactation management centre (Human Milk Bank) with the help of NHM in 2025.
2. SAT Hospital has been awarded the MBFHI certification in August 2022 and Dedicated lactation Counsellor is available. There continues to be promotion of developmentally supportive care in the NICU and dedicated high risk and well-baby follow up clinics.
3. Follow up is done in Collaboration with CDC and REIC. Family participatory care is promoted in a big way and mothers and actively involved in Kangaroo mother care and feeding of their sick babies in the NICU.
4. Parent education classes and group discussions are conducted twice weekly.

3. 8. 4. 12 Plastic surgery

The Department of Plastic Surgery at Government Medical College Thiruvananthapuram (GMCT) stands as a cornerstone of reconstructive and aesthetic surgical excellence in Kerala. Established in 1972 as a dedicated superspecialty unit, the department has evolved into a premier center for advanced plastic, reconstructive, and microsurgical interventions. It plays a pivotal role in managing complex trauma, congenital anomalies, burns, and post-oncologic reconstructions. The department's legacy is rooted in its commitment to restoring form and function, with a strong emphasis on compassionate care and surgical precision. Over the decades, it has nurtured a generation of plastic surgeons through its M. Ch. program,

contributing significantly to the development of plastic surgery services across the state and beyond. The department specializes in craniofacial surgery, hand surgery, microsurgery, cleft lip and palate repair, and post-burn reconstruction. It serves as a regional referral center for acute burn care and complex trauma requiring soft tissue coverage. While rooted in reconstructive surgery, the department also offers aesthetic procedures, balancing form with function. The department integrates clinical service with academic rigor, fostering a culture of continuous learning and surgical innovation. The department established the First Skin bank in the state.

Equipment & Facilities

- | | |
|-----------------------------------|--|
| 1. Burn Bathtub | 9. Operating microscope |
| 2. Set of mastoplasty instruments | 10. Microsurgery instruments |
| 3. Breast Retractors | 11. Nerve stimulator |
| 4. Dermatome | 12. Handheld Doppler |
| 5. Silicone implants | 13. Liposuction machine and fat grafting set |
| 6. Electric Saw and Drill | 14. Electro Cautery Machine |
| 7. Rhinoplasty instruments | 15. Burns ICU with ventilators. |
| 8. Skin Graft Mesher | |

Clinical Services

Intensive care Service provided by the Department :(Acute Burn care/Burn ICU), others: Liposuction, Breast augmentation Surgeries, Laser Scar Removal, Cranio facial surgeries, Burn Surgeries, Facial Reconstructive procedures, Rhinoplasty, Lip surgery, Ear Surgery, Cheek surgery, Face lift, Lipo Transfer, Post Burn reconstructive surgeries, Hand Surgery, Replantation Surgeries (Microsurgery), Endoscopic Plastic Surgery, Flap transfer Microvascular, Flap transfer Non Microvascular, Facio Maxillary and Reconstructive Orthognathic Surgery, Flap transfer, Skin grafting, Acute burn care, Trauma care, Tendon transfer, Nerve Repair (Brachial plexus nerve repair) and peripheral nerve construction), Hair transplant, Scar Revision Surgeries, Onco Reconstructive Surgeries, Hand Surgery, Dermato surgery.

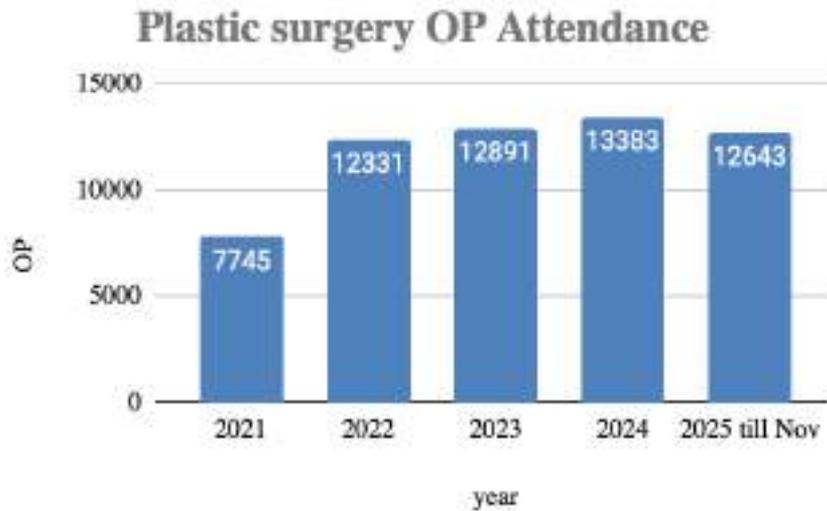


Figure 58. Plastic Surgery OP attendance

3. 8. 4. 13. Department of Paediatric Cardiology

The Department of Paediatric Cardiology, SAT Hospital was started as a division of the paediatrics department in 1998 by Dr Zulfrkar Ahmed with the vision of taking care of sick children with congenital heart diseases. It became an independent department by 2006. The department activities initially included outpatient, inpatient care, echocardiography, teaching and research. Regular teaching sessions are conducted for post graduate residents from the department of paediatrics and undergraduates.

In 2017-2018, there was installation of state-of-the-art facilities like a dedicated paediatric cardiac catheterization laboratory and high-end echocardiography machines. The department caters to infants and children with heart diseases from all over Kerala and from the neighbouring districts of Tamil Nadu. The department is one of the pioneer facilities in South India, started exclusively for treating infants, children and adolescents with congenital heart diseases and acquired heart diseases. Paediatric Cardiology speciality OPD has witnessed a patient load close to 8000 patients in 2024. Echocardiograms, including foetal echocardiography are performed on a routine basis on the other days. More than 7000 echocardiograms were performed in 2024.

Equipment & Facilities

Paediatric cardiac catheterization laboratory, high end echocardiography machines. A new modular paediatric cardiac surgery operation theatre 14 bedded post operative ICU, ventilators, ECMO facility. A new modular paediatric cardiac surgery operation theatre and a 14 bedded post operative ICU was commissioned in September 2021 under the National Health Mission.

Clinical Services

Transesophageal echocardiography, Cath study and hemodynamic assessment, Device closure of ASD, VSD, PDA, AP window, Device closure of coronary cameral fistula, RSOV, aorta to LV tunnel, paravalvar leaks, Balloon pulmonary valvotomy, Balloon aortic valvotomy, Pulmonary artery balloon dilation/stenting, PDA stenting, RVOT balloon dilation/stenting, Coarctation balloon dilatation and stenting, Device/coil closure of MAPCAs/Pulmonary AV fistulas, Pericardiocentesis

Rare cases: Covered stent Occlusion of Sinus Venosus ASD, AP window device Closure, Percutaneous Pulmonary Valve replacement, Complex Congenital Acyanotic heart diseases, like PAPVC of lower pulmonary veins, PDA interruption in New Born, BT Shunt in New Born, Pacemaker implant in 6 m old baby, Aortic Arch Repair in new born, Surgical closure of ostium secundum ASD, primum ASD, sinus venosus ASD, AV canal defect repair, VSD surgical closure (beyond infancy), PDA ligation, Coarctation repair beyond infancy, Arterial Switch operation, Surgical correction of TAPVC, Total correction of Tetralogy of Fallot, Surgical closure of RSOV, ALCAPA repair (Coronary translocation), Mitral/aortic valve repair, Mitral/aortic valve replacement.

Operational Statistics

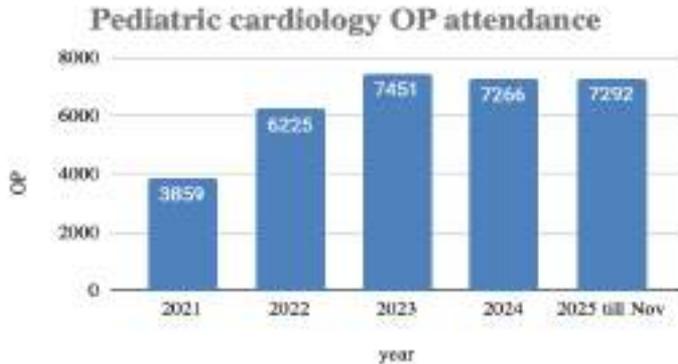


Figure 59. Paediatric cardiology OP attendance

3. 8. 4. 14 Paediatric Nephrology

Paediatric Nephrology service was started in SAT Hospital as a small unit in 2007 which was later upgraded to a department in 2015. Currently, the department provides comprehensive care to children with kidney diseases. The department is providing transplantation services in collaboration with the adult nephrology team. The Department started the DM program for Paediatric Nephrology in 2024-25. From 2018, the Department of Paediatric Nephrology has been involved in the International Society of Nephrology- Sister Renal Centre in collaboration with Cincinnati Children Hospital, Medical Centre. Ohio, USA one of the best Paediatric Nephrology Centres in the world. International collaboration with Cincinnati children's hospital started in 2018 at Level B was upgraded to level A International Society of Nephrology.

Equipment & Facilities

- 20 beds
- Exclusive Haemodialysis unit with 15 machines
- CAPD room with 4 beds
- Peritoneal dialysis cyclor
- Paediatric intensive care unit
- 2 beds for Paediatric Nephrology

Clinical Services

OP and IP services (Nephrology OPD – 1400 patients/month; Indoor patients – 80-100 admissions/month), Haemodialysis admissions -250 /month, Kidney Biopsy 5-6/month; Dialysis services -peritoneal and haemodialysis, Acute Dialysis for acute kidney injury, Plasma exchange for HUS, Anti GBM disease, Guillen Barrie Syndrome, ADAM; CKD program – CKD OPD, Comprehensive nephrology and nutritional management, Growth monitoring; Transplantation services and follow up – In collaboration with adult nephrology team, 51 transplants have been done so far with age group ranging from 2-18 years.

Operational Statistics

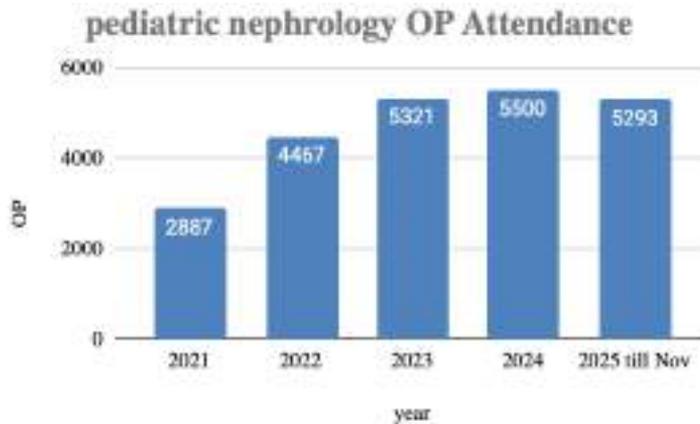


Figure 60. Paediatric Nephrology OP attendance

3. 8. 4. 15 Paediatric Neurology

The Paediatric Neurology department began in 1983, when it began a twice a week OP service with around 10 to 12 cases in a day. This OP has grown to 17, 901 patients in a year. In 1985, an EEG machine and EMG machine were procured for the department. In 1987, the division of Paediatric Neurology was created. In 1997, a Professor post was created for the division of Paediatric Neurology. Administrative sanction was given for the department in 2005. Special rules for Paediatric Neurology were formed in 2008. The vision is to have a tertiary care facility for Paediatric Neurology in the state. DM Paediatric Neurology with an intake of two residents a year began in 2020. Diploma in Neurotechnology course was begun in 2011 with an intake of four students. New state of the art EEG machines two in number were

procured in 2021. New state of the art EMG machines was procured in 2021. We started the first Spinal muscular atrophy clinic in the government sector in February 2022. A polysomnogram enabled EEG machine was procured in 2021. We have acquired a long term 64 channel long term video EEG sleep machine this year

Equipment & Facilities

- OP, IP and ICU facility, EEG and EMG rooms
- Equipments: pure tone audiometer, oto-acoustic emission meter,
- *Equipment for physiotherapy*: ultrasound machine and an electric Nerve stimulator

Clinical Services

For Autism and other developmental disabilities, Cerebral palsy, Concussion and Mild Traumatic Brain Injury (MTBI), Congenital malformations (including spinal bifida), Craniofacial abnormalities, Epilepsy, Headaches, Hydrocephalus, Mental retardation, Metabolic diseases, Movement disorders (including tics and Tourette syndrome), Neonatal neurology, Neurocritical care, Neurogenetic disorders, Neuromuscular disorders, Spasticity, Stroke, Tumours of the brain and spin.

Operational Statistics

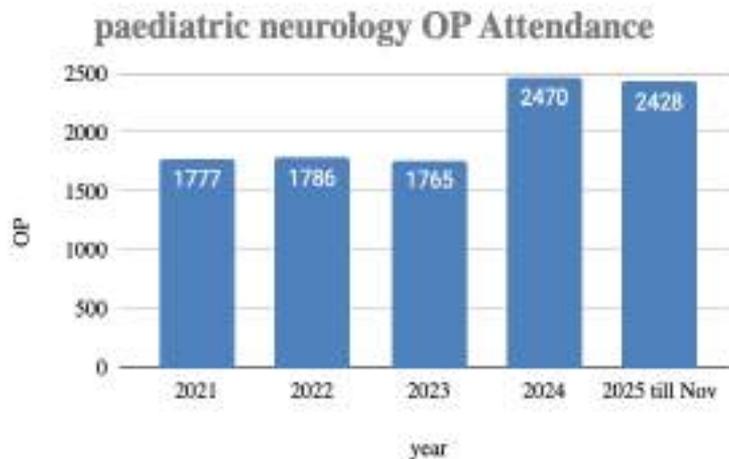


Figure 61. Paediatric Neurology OP attendance

3. 8. 4. 16 Department of Paediatric Surgery

The Department of Paediatric Surgery is located at Sree Avittam Thirunal Hospital (SAT Hospital) which was gifted to the children of Kerala by the Royal family of Travancore in memory of their late heir to the throne-Sree Avittam Thirunal Rama Varma who succumbed to an undiagnosed cardiac illness in childhood. The hospital started functioning in 1950 with 80 beds exclusively for children. A maternity unit was added to the Paediatric Unit in 1952 and this hospital became a Mother and Child Care Institute and part of Medical College, Thiruvananthapuram. Paediatric surgical problems were managed by the Department of General Surgery under Dr. Jacob Taliat in 1954. The first ever Paediatric Surgery unit in India was established at Medical College, Thiruvananthapuram. In 1954, Dr R Raman Nair was appointed as tutor in Paediatric Surgery. He completed his MS General Surgery in 1956 and took charge of the department which had become independent by then. In 1955 after training in USA, Dr Raman Nair was promoted to the post of Head of Dept of Paediatric Surgery. He developed the unit as an independent department with help of UNICEF in 1956.

The Paediatric Surgery Department is dedicated to providing the highest quality of surgical care to children, focusing on diagnosing and treating a wide range of surgical conditions in newborns, infants, and adolescents.

The team includes highly trained paediatric surgeons, nurses specialized in paediatric care, and anaesthesia providers, all dedicated to the unique needs of young patients; in treating a wide range of conditions, from common childhood ailments to complex congenital or acquired disorders. Provides surgical care for infants and children, addressing congenital anomalies, injuries and childhood diseases with advanced techniques and compassionate care.

Equipment & Facilities

- | | |
|--|------------------------------------|
| 1. Wards – 2 (80 beds total) | 5. Paediatric Cystoscope |
| 2. Paediatric & Allied Specialty ICU | 6. Vascular surgery instrument set |
| 3. Faculty Rooms | 7. Laparotomy and thoracotomy Set |
| 4. Open and laparoscopic Paediatric surgery equipments | 8. Bronchoscopy set |

- | | |
|--|--|
| 9. Video urodynamic equipment's with C ARM | 12. Intra-operative ultrasound Machine |
| 10. Ultrasonography with color Doppler and curvilinear probe | 13. Fully equipped disaster trolleys |
| 11. Linear probe, and Phased array probe(cardiac) | 14. Ventilators |
| | 15. Multipara monitors and Ambu bags. |

Clinical Services

General Paediatric Surgery, Paediatric genitourinary surgery, Paediatric Gastro-intestinal and hepatobiliary surgery, Paediatric thoracic surgery, Reconstructive surgery, Neonatal surgery, Paediatric surgical oncology, Paediatric trauma and burns, Paediatric Minimally invasive surgery and endoscopies, Advanced urology surgeries - Laparoscopic pyeloplasty, laparoscopic partial nephrectomy in duplex kidney, laparoscopic nephroureterectomy for non-functioning kidney; Advanced Cystoscopy procedures like posterior urethral valve fulguration, cystoscopy assisted bladder calculi removal(cystolithotomy), urinary bladder mass biopsy, duplex injection for Vesico ureteric reflux; Advanced laparoscopic procedures for ovarian diseases like ovarian torsion, ovarian cyst and excision for remanent malarian structures and streaky gonads; Laparoscopic orchiopexy single staged and staged procedure. ; Advanced Thoracoscopic procedures like Video assisted thoracic surgery for empyema thorax, Tracheoesophageal fistula with esophageal atresia repair and Thoracoscopic foreign body removal.

Advanced laparoscopic abdomen procedures for eventration of diaphragm, Laparoscopic Morgagni hernia repair, laparoscopic assisted mesenteric cyst excision with end-to-end anastomosis, laparoscopy assisted Meckel's diverticulectomy and end to end anastomosis, laparoscopic omental cyst excision, laparoscopic assisted splenectomy, laparoscopic adrenalectomy, laparoscopic cholecystectomy. Single incision laparoscopic surgery (SILS) for appendicectomy. Bronchoscopy removal of airway foreign body and brocho-alveolar lavage. Oesophagoscope for oesophageal stricture dilation and removal of esophageal foreign bodies.

Operational Statistics

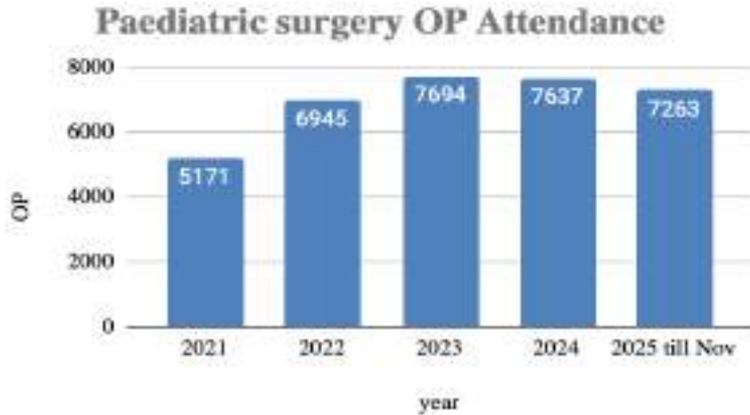


Figure 62. Paediatric Surgery OP attendance

3. 8. 4. 17 Reproductive Medicine

The Department of Reproductive Medicine at SAT Hospital, addresses infertility, assisted reproductive technology (ART), puberty, menopause, reproductive system diseases, sexual dysfunction, genetics, endocrinology, early pregnancy, and fertility-enhancing surgeries. This subspecialty emerged due to gaps in postgraduate curricula and limited ART availability in public teaching hospitals, leading the National Medical Commission to recognize MCh in Reproductive Medicine and Surgery. The unit launched in 2010, became operational in 2012, and delivered South India's first public sector IVF-ICSI babies in 2013 at one-third private sector costs. Milestones include the first IVF for an ovarian cancer survivor in 2016, M. Ch program start in 2019 (first in government sector South India outside AIIMS), registration as a Level II ART clinic in 2023, and over 500 IVF babies by 2025, plus oocyte cryopreservation for cancer patients.

Assisted Reproductive Technology was made available to the common man at reduced affordable rates, for the first time in the public sector, and also in the whole of South India, when the center was set up. The drugs used were made available at very low rates and a nominal amount was collected for the procedure as such. The rates have remained

unchanged over the years and hence the cost of IVF remains at almost 1/3 the cost in the private sector.

Equipment & Facilities

- Outpatient unit with ultrasound facilities, counselling area, a library and a lecture hall, IVF area and the endoscopy operation theatre.
- The IVF area has an ultrasound room, a semen collection room, an examination room, andrology lab and an IUI room.
- IVF operation theatre and embryology lab, operation theatre for endoscopic surgeries with a recovery room, a ward which is 20 bedded, two high end ultrasound machines for Ovum pick up and Embryo transfer, a stereo zoom microscope and andrology workstation, centrifuge and mini-incubator, 3 Heracell carbon dioxide incubators, one benchtop triple gas incubator, a stereo zoom microscope and workstation and an inverted microscope with micromanipulator and laser for assisted hatching, vitrification (freezing) and 4 jumbo cryocans for storing embryos and sperm. (One is exclusively used for semen storage for cancer patients referred from Regional Cancer Centre Trivandrum and Medical College Trivandrum).
- The endoscopy theatre has facilities for operative laparoscopy and hysteroscopy as part of fertility enhancing surgeries.

Clinical services

Basic infertility services- OP conducted on all days except Sundays, Registration of new patients, Infertility work up, Ultrasound, Sono salpingography, Medical management of infertility, Semen analysis, intrauterine insemination. Advanced Infertility Management (Assisted Reproductive Technology)- In Vitro Fertilisation (IVF), Intra Cytoplasmic Sperm Injection (ICSI), Surgical sperm retrieval (PESA, TESA, TESE), Embryo freezing, Sperm freezing for cancer patients and for IVF, Oocyte vitrification, Embryo transfer (Fresh and Frozen), Blastocyst transfer, Laser assisted Hatching, Fertility preservation for cancer patients. Fertility enhancing surgery- Diagnostic hysteroscopy, Operative Hysteroscopy(septal resection, myomectomy, polypectomy), operative laparoscopy (myomectomy, adhesiolysis in endometriosis, cystectomies, tubal microsurgery)

Operational Statistics**Table 28: Reproductive Medicine workload**

Year	2021	2022	2023	2024	2025 till April
OP	10354	14066	14334	13451	4098
IP	246	356	323	316	124
surgeries	788	1080	1120	993	314

3. 8. 4. 18 Urology

The Urology Department was dedicated in 2011. This department has facilities for monopolar TURP- Trans Urethral Resection of Prostate, lithotripsy, retrograde intrarenal surgery, laparoscopic surgeries, pyeloplasty, trans urethral resection of bladder tumor, percutaneous nephrolithotomy, pyelolithotomy, testicular vein ligation, live donor and diseased donor renal transplant, urethroplasty and all other open surgeries. The Department offers a 3-year full-time M. Ch. (Master of Chirurgiae) in Urology program, affiliated with the Kerala University of Health Sciences (KUHS) and approved by the National Medical Commission (NMC).

Equipment & Facilities

Cystoscopy set adult and Paediatric Nephroscope, Mini - PERC nephroscope, PCNL accessories, Ureteroscope and accessories, C arm image intensifier, OIU Instrument set, TURP set, ESWL Machine, Urodynamic machine, No scalpel Vasectomy instruments set, cut biopsy gun, Kidney transplant instrument set, Laser Lithotripsy Machine, Pneumatic Lithotripter, Laparoscopy equipment set, Ultrasonic Dissector/Coagulator, Vessel Sealing Equipment, Ultrasonography machine (colour Doppler with linear, convex and transrectal sonography prostate (TRUS) probes and puncture guides attachments for convex and TRUS probes, Laparoscopy Trainers

Clinical Services

Endourology, Diagnostic Cystoscopy, Cystolithotripsy, TURP, TURBT OIU, URSL, PCNL, RIRS, P. U. valve fulguration, STING surgeries, Open Surgeries- Pyelolithotomy, Ureterolithotomy, Anatomic Nephrolithotomy, Cystolithotomy, Simple Nephrectomy, Radical Nephrectomy, Partial nephrectomy, Radical Cystectomy with Urinary diversion, Radical Prostatectomy, Total Prostatectomy, Partial Prostatectomy, Orchidectomy, Pyeloplasty, Hypospadias Corrective Surgery, Urethroplasty, Ureteric reimplantation adult, Ureteric reimplantation paediatric, Lithotripsy (ESWL), Kidney transplant, Prostate biopsy, Andrology Surgery(Penile implant), varicocelectomy, Laparoscopy/Retroperitoneoscopy Simple Nephrectomy, Radical Nephrectomy, Partial nephrectomy, Ureterolithotomy, Cystectomy, Orchidopexy, varicocelectomy, Ureteric reimplantation.

Specialty Clinics

Female Urology clinic, Paediatric Urology clinic, Uro-Oncology, Andrology, Renal Transplantation

Operational Statistics



Figure 63. Urology OP attendance

Transplant Statistics in Medical College Thiruvananthapuram (2016 – Sept 2025)

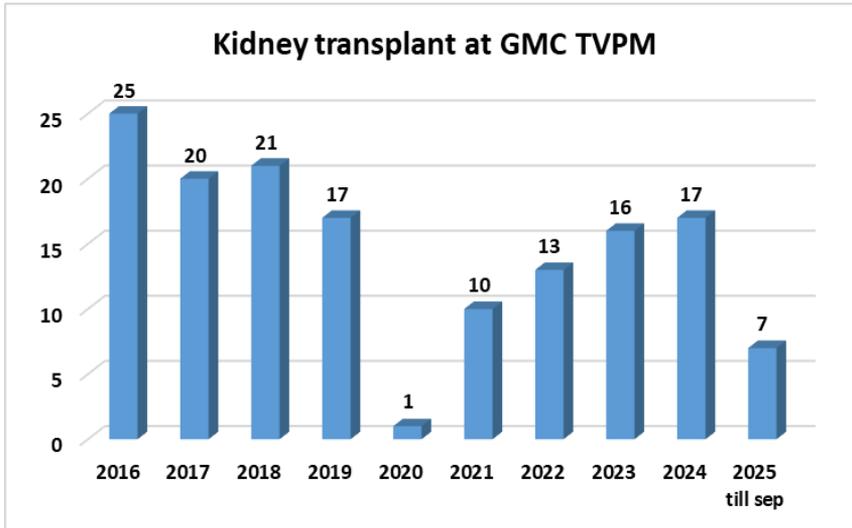


Figure 64. Number of dialysis done

Table 29: Urology workload

Name of the surgery- Urology	2022	2023	2024
Diagnostic cystoscopy	315	424	439
Cystolithotripsy	49	56	59
TURP	240	271	264
TURBT	125	131	146
OIU	13	26	34
URSL	305	324	358
PCNL	54	166	174

RIRS			21
Open surgeries			
Pyelolithotomy	15	17	24
Ureterolithotomy	9	11	18
Anatrophic nephrolithotomy	32	30	21
Cystolithotomy	15	22	24
Simple nephrectomy	15	12	14
Radical nephrectomy/ Radical cystectomy with urinary diversion	35	40	44
Radical prostatectomy	12	14	17
Total penectomy	1	5	7
Partial penectomy	2	1	4
Orchidectomy	4	2	1
Pyeloplasty	25	32	36
Hypospadias corrective surgery	11	39	37
Urethroplasty	4	5	4
Ureteric reimplantation adult	8	13	17

Ureteric reimplantation paediatric	4	7	10
Lithotripsy (ESWL)	343	13	186
Kidney transplant	15	16	22
Prostate biopsy	271	294	301
Varicocelectomy	19	16	17

3. 8. 4. 19 Foetal Medicine

The Fetal Medicine Department at SATH Thiruvananthapuram, is a landmark addition to Kerala's public healthcare. Launched officially as a dedicated department in late 2024 (building on the earlier "SRADHA" project). Led by Dr. Pio James, a specialist in Maternal-Fetal Medicine, this unit is designed to provide advanced, high-precision care for unborn babies, making it the second government facility in India (after AIIMS Delhi) to offer such comprehensive services for free. The unit serves as an apex referral center for high-risk pregnancies across Kerala and neighboring districts.

Its services are categorized into screening, diagnostics, and advanced interventions:

- 1) Routine & Specialized Scans Nuchal Translucency (NT) Scan (11–14 Weeks), detailed Anomaly/Morphology Scan (18–22 Weeks), Fetal Echocardiogram, Growth & Wellbeing Scans
- 2) Advanced Diagnostic Procedures- NIPT (Non-Invasive Prenatal Testing), CVS (Chorionic Villus Sampling), Amniocentesis.

Postgraduate students of SAT Hospital for Department of OBG and Neonatology are posted on a monthly basis for training and observer ship and are appropriately trained.

Equipment & Facilities

High end Ultrasound Machine, Fetal Medicine software (Sonocare), lecture hall and faculty rooms.

Clinical Services

Clinical services are offered for patients who are send for a second opinion registered via SAT Hospital, Pre and periconceptional counselling and care - In a busy OPD like that in SAT Hospital, pre conceptional counselling may have its shortcomings. Consultant are referring high risk mothers for evaluation and management in SRADHA FMU.

Screening for Downs Syndrome (11-14 weeks); Early assessment of the mother and fetus in high-risk pregnancy along with First Trimester Target scan (11-14 weeks) and Early Target scans (16-17 weeks), TARGET/TIIFA/Anomaly scan (18-20 weeks), Surveillance for Fetal Growth disorders, Surveillance of complicated Multiple pregnancies. Detailed assessment of certain organ systems - Foetal Echocardiography, Foetal neuro sonogram, Foetal skeletal survey are dedicated scans that are done in our unit.

Invasive procedures and foetal intervention -amniocentesis, chorionic villus sampling are done in liaison with a local centre.

3. 8. 4. 20 Medical Genetics

The Genetic clinic started in 2007 at the Department of Paediatrics, where Diagnosis of Genetic disorders and counselling to the affected families was given. Proposal for a cytogenetic and molecular lab submitted through CDC, and with the funding support from NABARD, laboratory in CDC started in 2012. This lab got accredited by NABL in 2023 and presently completed more than 5000 karyotype and basic molecular tests. ICMR multicentric study on Lysosomal Storage Disorders was completed in 2017 With genetic clinic and laboratory facility Government of India recognised our Medical college as centre of excellence for Rare disease, in 2022 December.

Considering the facilities and services, the Government of Kerala announced the Department of Medical Genetics in 2023, the first of its kind in any state Medical College in India. The Department of Medical Genetics started functioning from June 2024 and one more faculty joined in 2025.

ICMR registry for rare and inherited metabolic disorders started in 2024. NIDAN Kendra, DBT project for Diagnosis of genetic disorders also started in 2024. Presently Department of Medical Genetics having clinical work on all days. With cytogenetic/ molecular facility,

prenatal diagnostic services through foetal medicine department, management of rare diseases, genetic counselling. Presently the number of staff in the department is 20 which includes 3 faculty and 17 project staff. We are having few multicentric projects and clinical trials. Planning to start a DM programme in medical Genetics in 2026.

Equipment & Facilities

There are cytogenetic/ molecular facility, prenatal diagnostic services through fetal medicine department, management of rare diseases and genetic counselling.

Clinical Services

The genetics clinic works on all days of the week.

Operational Statistics

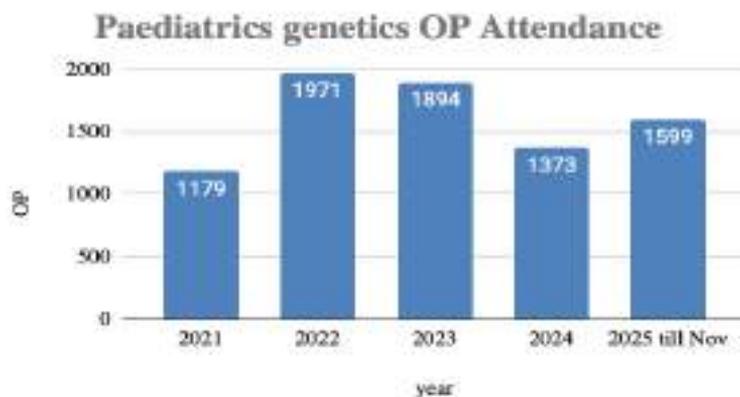


Figure 65. Genetics OP attendance

3. 8. 4. 21 Medical Oncology

The department started functioning in 2020 with Dr. Harish S as the Medical Oncologist. This department plays a pivotal role in Cancer care offering services with a focus on chemotherapy and systemic cancer treatment. It provides comprehensive care for patients with various malignancies primarily focussing on chemotherapy targeted therapy and supportive Oncology care.

CHAPTER 4

HUMAN RESOURCE PROFILE

4.1 Faculty Position of Medical College

4.1.1 Summary Faculty Position Government Medical College, Thiruvananthapuram

Table 30: Faculty posts sanctioned in GMC Thiruvananthapuram

Department	Professor	Associate Professor	Assistant Professor	Senior Resident
TOTAL	83	98	414	155

* Detailed list is included in Annexure 4.

4.2 Ministerial/Paramedical/Support staff details

4.2.1 Administrative Wing

The administrative wing of the Medical College is managed by two Administrative Officers, one each for MCH and RIO, along with three Accounts Officers, two Senior Superintendents, and seven Junior Superintendents (five in MCH and two in SAT). It also includes three Lay Secretaries (one each in MCH, SAT, and RIO), 123 Clerk Typists (112 in MCH, five in SAT, and six in RIO), and 15 Senior Clerks (four in MCH and 11 in SAT). In addition, there are 11 Clerical Attenders, 30 Confidential Assistants (29 in MCH and one in RIO), and 28 attendants working in this wing.

4.2.2 Nursing Wing

The nursing wing is headed by a Chief Nursing Officer each in MCH and SAT, supported by 22 Nursing Superintendents (15 in MCH, six in SAT, and one in RIO) and two Deputy Nursing Superintendents posted in RIO. There are also 174 Head Nurses and 951 Nursing Officers serving in the Medical College. Their distribution is as follows.

Table 31: Nursing Manpower- Sanctioned posts in GMC Thiruvananthapuram

Designation	MCH	SAT	RIO	Total
Head Nurse	105	57	12	174
Nursing Officer	617	283	51	951

4.2.3 Laboratory Staff

There are 2 Senior Scientific Officers, 1 Junior Scientific Officer, 2 Biochemists, 3 Senior Laboratory Technicians, 57 Laboratory Technicians, 5 Lab Assistants, and 43 Junior Lab Assistants.

4.2.4 Pharmacy Wing

A well-established pharmacy wing functions in the college, staffed by 24 Pharmacists (19 in the Medical College and 5 in RIO), 1 Pharmacist Storekeeper each in MCH and RIO, and 1 Store Superintendent.

4.2.5 Support Staff

The support staff includes 450 Nursing Assistants (307 in MCH, 105 in SAT, and 38 in RIO), 211 Grade I Hospital Attenders (145 in MCH, 54 in SAT, and 12 in RIO), and 287 Grade II Hospital Attenders (203 in MCH, 68 in SAT, and 16 in RIO). There are 99 Attenders (94 in MCH and 5 in SAT), 16 Lift Operators (9 in MCH, 6 in SAT, and 1 in RIO), and 6 Telephone Operators (3 in MCH, 2 in SAT, and 1 in RIO). The team also comprises 1 Assistant Leprosy Officer, 1 Tutor Technician, 1 Orthoptician (RIO), 1 TMT Technician, 7 Cath Lab Technicians, 2 Cooks, 2 Dieticians, 13 Optometrists (RIO), 1 Treatment Organiser, 2 Chief Physiotherapists, 2 Chief Occupational Therapists, 8 Scientific Assistants, 1 KSACS Counsellor, 14 Cleaners/Sweepers, 3 Tailors, 3 Barbers, 1 Darkroom Assistant, 3 Health Educators, 2 Social Scientists, 2 Junior Research Officers, 4 Research Assistants, and 1 Senior Scientific Assistant.

4.2.6 Radiology Assistance

The Radiology Department has 14 X-ray attendants and 59 radiographers.

4.2.7 Medical Record Library

MCH, SAT, and RIO each have an independent Medical Records Library. The MCH library is managed by 1 Medical Records Library Superintendent, 7 Record Librarians, 1 Clerical Attender, and 6 support staff.

4.2.8 Housekeeping Wing

The housekeeping wing is responsible for campus cleanliness and biomedical waste management and includes 1 Health Supervisor, 1 Health Inspector, 1 Lady Health Inspector, 2 Junior Health Inspectors, 6 Gardeners, 71 full-time Sweepers, and 25 part-time Sweepers. Two Public Health Nurses are posted in SAT to coordinate the immunisation programme.

4.2.9 ECG Technicians

There are 10 ECG Technicians working in the institute to support the Medicine and Cardiology Departments in patient care.

4.2.10 Operation Theatre Assistance

Operation theatre services are supported by 3 Theatre Technicians (2 in MCH and 1 in RIO), 6 Anaesthesia Technicians, 1 Theatre Mechanic, and 1 Theatre Assistant.

4.2.11 Biomedical Engineering Wing

The biomedical engineering wing consists of 1 Technical Officer, 1 Technical Assistant (R&AC), 1 Technical Assistant (Electronics), 1 Technical Assistant (Machinist), 3 AC Mechanics, 3 Mechanics, 2 Electricians, 2 Refrigeration Mechanics, 1 Fitter, 1 Carpenter, 1 Painter, 1 Lift Mechanic, 1 Instrument Mechanic, and 1 Helper.

4.2.12 Security Section

The security section is staffed by 1 Security Officer, 2 Assistant Security Officers, 38 Sergeants, and 9 Watchmen. Additional security personnel are engaged on a contract basis as required.

4.2.13 Central Sterile Supply Department

The Central Sterile Supply Department (CSSD) is managed by a Foreman, with 10 Power Laundry Attendants and 19 Dhobis.

4.2.14 Dialysis Unit

The Dialysis Unit is operated by 2 Dialysis Technicians and 13 Lab Assistants dedicated to dialysis services.

4.2.15 Audiology Wing

The Audiology Wing is managed by 1 Audiologist, 2 Audiologist-cum-Speech Pathologists, 2 Clinical audiometricians, and 1 Rehabilitation Coordinator.

4.2.16 Vehicle Section

The Vehicle Section is overseen by a Vehicle Officer in charge and employs 19 Drivers (17 in MCH and 2 in RIO) and 2 Bus Cleaners.

4.2.17 Blood Bank Assistance

The Department of Transfusion Medicine has 22 Blood Bank Technicians who support the activities of the Blood Bank.

4.3 Supporting System

4.3.1 The Central Library

A primary library for medical students, faculty, and researchers, providing extensive medical texts and digital resources. The library has a vast collection of medical books and journals, digital resources like e-books and online databases, Internet connectivity and computer access for research, and Dedicated study areas and conference facilities. The AKMG Learning Resource Center (LRC) was established with funding from the Association of Kerala Medical Graduates (AKMG). It is an air-conditioned facility within the central library providing students and staff access to computers, internet (for e-journals/books), a small conference room, and thesis preparation support, significantly enhancing medical education resources in the institute by offering digital access, print resources, and dedicated spaces for research, with membership required and specific hours for different user groups. It's a hub for

learning, featuring online databases, journals, and a traditional collection, crucial for medical education in the region, alongside other facilities like the Principal's Office Library.

The library book collection includes 48,874 volumes and 21,437 titles of books and subscribes to 4 newspapers and 12 journals. The library has a rich bound volume journal collection, more than 1000 volumes, and has a good collection of theses and computer discs. The library is equipped with one senior grade librarian, four librarians, one typist, 4 office attendants, one watchman and 3 sweepers.

4.3.2 Central Workshop and Biomedical Engineering

The central workshop and biomedical engineering wing of Medical College is a facility primarily involved in the maintenance and management of medical equipment within the hospital. The department is responsible for testing, repairing, and maintaining the hospital's diagnostic and therapeutic equipment to ensure they are in proper working condition for patient care. Biomedical engineers regularly perform preventive maintenance on all equipment. They coordinate annual maintenance check-ups of all high-tech equipment in a timely manner. The department provides emergency service in case of equipment breakdowns. They facilitate training of medical personnel in the safe and effective use of medical devices.

The functioning of the central workshop and biomedical Engineering wing is equipped with a workshop and the following skilled manpower, namely one Technical Officer, one Technical Assistant (R&AC), one Technical Assistant (Electronics), one Technical Assistant (Machinist), three AC mechanics, three mechanics, two electricians, two refrigeration mechanics, one fitter, one carpenter, one painter, one lift mechanic, one instrument mechanic and one helper.

4.3.3 Digital Broadcasting Centre (DBC)

The digital broadcasting centre is a multimedia awareness initiative located within the Sree Avittam Thirunal (SAT) Hospital, established by the SAT Hospital Health Education Society, that focuses on creating and telecasting health education and awareness programmes for patients and bystanders within the hospital premises via a network of television sets installed in the wards, op and waiting area.

4.4 Security Section

The security section at Medical College, Thiruvananthapuram, is a crucial operational unit responsible for ensuring a safe and secure environment for patients, staff, students, and property. Security section monitors all entry and exit points of the campus, departments, and wards; verifies identification (ID cards) of staff, students, and visitors entering the institute; and issues temporary passes as per protocol, assisting with crowd control during events and emergencies, prohibiting unauthorised entry to restricted areas, Coordinating with local police and other district authorities on security and emergency matters, and enforcing institutional rules and regulations, including those related to parking, speed limits, and prohibited items. Thus, their duties are comprehensive, encompassing general security, emergency response, and adherence to specific hospital and educational institution regulations mandated by the Government of Kerala, the National Medical Commission (NMC), and the Kerala University of Health Sciences (KUHS). This section, Maintaining law and order and ensuring peace and tranquillity on campus. All these are made operational by a team of trained workforce composed of one security officer, two Assistant Security Officers, 19 sergeants.

Facility Management

There are 6 gardeners and 43 Full time sweepers, 19 part-time sweepers and 8 watchmen also working under him to maintain cleanliness mainly in the academic block of Medical College, Thiruvananthapuram.

4.5 Vehicle Section

The Vehicle Section at Government Medical College, Thiruvananthapuram, is primarily responsible for managing the institution's vehicles by providing transportation for staff and students for official purposes, such as field visits, medical camps, and official meetings. This section is managing the scheduling and dispatching of all college-owned vehicles, coordinating regular maintenance, servicing, and repairs of all vehicles owned by the institute. This section is efficiently managed by one vehicle officer in charge, 10 drivers, one driver cum OA and two bus cleaners.

4.6 Power laundry

The power laundry of Government Medical College is managed by a foreman, 9 power laundry assistants and 12 dhobis. They gather soiled laundry from various wards and departments and sort items based on type, colour, and contamination level (e.g., infectious vs. non-infectious) and operate the laundry system to ensure the complete removal of stains and contaminants, adhering to specific protocols for dealing with blood stains, body fluids, and disinfectants to meet hospital hygiene regulations. The role is crucial for maintaining the strict hygiene and infection control standards required in a medical environment.

4.7 Medical Records Department (MRD)

The Medical Records Department (MRD) of Government Medical College Hospital, Thiruvananthapuram functions as the core information hub of the hospital, responsible for systematically collecting, organising, securing and retrieving all patient-related health data. It maintains complete records from registration to discharge, including diagnoses, treatments, investigations and outcomes, and ensures confidentiality and easy accessibility of data for clinical decision-making, administration, legal purposes and research. The department plays a central role in smooth hospital operations by supporting outpatient and inpatient services, medico-legal documentation, statutory reporting and quality-improvement activities.

The Administrative Head of the MRD is the Medical Record Superintendent, supported by the Medical Record Librarian and a team of clerical and technical staff. Together they handle key functions such as registration and numbering, filing and indexing of records, discharge analysis, coding and classification, preparation of hospital statistics, and timely retrieval of case records for patient care, clinical audits and teaching. Despite high workload and staff constraints, the MRD strives to keep records up to date and to respond promptly to the needs of clinicians, administrators and patients.

In terms of organisational structure, the MRD reports to the Hospital Superintendent and, through him, to the Principal of the Medical College. Support staff posted from different sections of the hospital work in close coordination with the core MRD team to complete

day-to-day activities such as movement of case sheets between wards and MRD, preparation of medicolegal case files, and servicing requests from various departments.

4.8 NODAL Officers

Table 32: Nodal officers for various schemes in GMC Thiruvananthapuram

Sl. No.	Name of the Scheme	Name of Nodal Officer
1	Capacity building for developing trauma care facilities in Govt. Hospitals located in national highways	Dr Viswanathan K V
2	NPPMBI	Dr Premlal A P
3	Skill Centre	Dr Aneesh Raj
4	Sotto	Dr Noble Gracious
5	NPPCD	Dr Venugopal
6	MRU	Dr Sandhya C V
7	VRDL	Dr Manjusree
8	NMHP	Dr Krishnan S
9	NOHPPCZ	Dr Manjusree
10	National policy for Rare Diseases	Dr Sankar V H
11	NMCN	Dr Santhosh G S
12	ICMR-PCOS National Task Force Study	Dr PK Jabbar, HOD Endocrinology
13	ICMR-NCDIR-HBSR	Dr Chithra, HOD Neurology

14	ICMR DHR Project	Dr Susan Uthup
15	NIDAN KENDRA	Dr Shankar
16	ICMR Task Force Project	Dr Krishna Das Devadas
17	Emergency Medicine related Pancreatitis and major Gastrointestinal disease	Dr Viswanathan K V
18	GMCT-Accounts-IMPUTES Project under ICMR - DHR - Neurology	Dr Chithra, HOD Neurology
19	INTRINSIC Trial	Dr Chithra, HOD Neurology
20	ELAN	Dr Chithra, HOD Neurology
21	STENOSIS	Dr Chithra, HOD Neurology
22	INSTRUCT Phase II	Dr Chithra, HOD Neurology
23	Research Project	Dr Susan Uthup
24	DBT Project	Dr Susan Uthup
25	Gastroenterology Project	Dr Krishna Das Devadas
26	ICMR-DHR Project	Dr Shankar V H
27	ACCS Project	Dr. Priyasree J

CHAPTER 5

HEALTH INFRASTRUCTURE DEVELOPMENT

5.1 Overview

Government Medical College, Thiruvananthapuram, is located on a 114-acre land area, situated about 4 kilometres (2.5 mi) from northwestern Thiruvananthapuram city. Its layout and architectural designs were prepared by J. A. Ritchie of Bombay. It includes The Medical College Hospital, Sree Avittam Thirunal Hospital, Regional Institute of Ophthalmology, Institute of Chest Diseases, Priyadarshini Institute of Paramedical Sciences and College of Pharmaceutical Sciences, the Colleges of Nursing and Dental College.



Figure 66. Government Medical College, Thiruvananthapuram Campus layout

Over the last 10 years, Government Medical College, Thiruvananthapuram, including the Medical College Hospital, SAT hospital, Regional Institute of Ophthalmology, and Institute of Chest Disease, along with the Institute of Paramedical Sciences, has seen significant developments in infrastructure, new departments, advanced treatment facilities, and national recognition.

5.2 Blocks and Major buildings

5.2.1 Administrative block



Fig 67. Government Medical College, Thiruvananthapuram, Office of the Principal

The campus, in addition to the academic block, houses several hospitals and institutions, including Medical College Hospital (MCH), the Sree Avittam Thirunal Hospital for Women and Children (SAT Hospital), the Outpatient Block, the Super speciality block and Multi-speciality block, the Priyadarshini Institute of Paramedical Sciences, the college of Pharmaceutical sciences, the college of Nursing and the Dental College. The ophthalmology department is being upgraded to a national-level independent institute as the Regional Institute of Ophthalmology (RIO). The autonomous institutes housed in the Medical College campus include the Regional Cancer Centre (RCC), Sree Chitra Thirunal Institute for Medical Sciences and Technology (SCTIMST), Child development centre (CDC) and Multidisciplinary Research Laboratory (MDRL).

5.2.2 Academic block

The Academic block houses the departments of Anatomy, Physiology, Biochemistry, Pathology, Pharmacology, Microbiology, Forensic Medicine and Community Medicine. It also includes Lecture halls, Practical labs, Demonstration rooms and the Silver Jubilee auditorium.



Fig. 68. Government Medical College, Thiruvananthapuram, Academic Block

5.3 The Medical College Hospital

The Medical College Hospital is the tertiary-level referral hospital and the largest multi-specialty Government hospital in South Kerala, providing comprehensive and advanced health care for people in the Thiruvananthapuram, Kollam, Pathanamthitta, and Alappuzha districts and adjacent districts in Tamil Nadu. The hospital includes a main hospital block, trauma care and emergency care and an outpatient block. The 1,950-bed hospital admits

80,000+ patients a year and provides over 75,000,000 outpatient consultations. The outpatient block houses outpatient wings of medical and surgical specialities, a pharmacy, an ART centre and an ART plus centre, the Integrated Counselling and Testing Centre (ICTC), the Medical Superintendent's office and resident and graduate housing. The hospital averages 55 major and 125 minor operations. Bed occupancy is 90 to 95 per cent throughout the year.



Fig. 69. Government Medical College, Thiruvananthapuram, Emergency Medicine and Trauma care

5.4 Sree Avittam Thirunal Hospital (SAT)

The women's and children's hospital named Sree Avittam Thirunal (SAT) hospital was built in 1952 by the Travancore Royal family in memory of Prince Sree Avittam Thirunal, who died at the age of eight years due to rheumatic heart disease. The hospital houses the departments of obstetrics and gynaecology and paediatrics. This hospital performs 35+ vaginal deliveries and 15+ caesarean sections per day, which is the highest number of deliveries reported in Asia.



**Fig 70. Sree Avittam Thirunal Hospital, Government Medical College,
Thiruvananthapuram**

The new Mother and Child Block at SAT Hospital, a facility with multiple floors for Gynaecology, Labour, ICU, Labs, and OP services, has been partially functional since 2017



Fig 71: The new Mother and Child Block, Sree Avittam Thirunal Hospital, Government Medical College, Thiruvananthapuram.

5.5 Blood Bank, Central Laboratory and imageology complex

The Medical College Hospital Blood Bank is located within the MCH campus opposite the heritage (old) hospital block. The blood bank evolved into the Department of Transfusion Medicine, which was designated a Regional Blood Transfusion Centre in 2009. This building houses the Department of Transfusion medicine, Lab complexes of Microbiology, Clinical pathology and Biochemistry and the MRI, Ultrasound Scan Imaging rooms.

5.6 Super Speciality Block (SSB)

The speciality block, dedicated in 2011 has six specialities functioning in this block, namely the nephrology, urology, neurology, neurosurgery and medical and surgical gastroenterology departments and their out- and inpatient wings. It has 40 ICU beds, 25 high-care beds and six modular operating theatres. Cadaver organ retrieval and transplant

began in 2012, making it the first government hospital to offer the super specialty service on a wide scale.



Fig 72: Super specialty Block, Government Medical College, Thiruvananthapuram

5.7 Outpatient Block at Medical College Hospital

The building was inaugurated along with a super specialty block and became operational in 2011. Acts as the Central hub for outpatient consultations across numerous medical and surgical specialities. One of the pharmacy, ART centre and ART plus centre, Integrated Counselling and Testing Centre (ICTC), superintendent's office and resident and graduate housing are located in this block



Fig 73: Outpatient Block, Government Medical College, Thiruvananthapuram

5.8 multi-speciality block (MSB)

The multi-speciality block (MSB) at Government Medical College Hospital (MCH) was inaugurated in 2018 by Sri Pinarayi Vijayan, the Chief Minister of Kerala. It houses the sophisticated intensive care units of various medical specialities with 102 ICU beds with ventilator facilities and 44 high-care beds. The building has two levels below the ground, where one floor has been devoted to parking facilities, an electrical station, a pumping room, an oxygen plant, a maintenance room and a dining room for visitors to the hospital.



Fig 74: Multi Specialty Block, Government Medical College, Thiruvananthapuram

5.9 Physical Medicine and Rehabilitation (PMR) Department

The PMR Department was started in 1972. The PMR department is located about 100 metres from the medical college main gate on the Medical College junction. The department offers comprehensive rehabilitation services, including physiatry, rehab nursing, physiotherapy, occupational therapy, orthotics, prosthetics, social rehab, etc. The department conducts specific clinics for cerebral palsy, sports injury, obesity and stroke and also weekly outreach clinics at the Pangappara Medical College unit. Also, it provides a postgraduate course in PMR (MD PMR) for qualified MBBS graduates.



Fig 75: Physical Medicine and Rehabilitation (PMR) Department, Government Medical College, Thiruvananthapuram

5.10 College of Pharmaceutical Sciences

Kerala's first pharmaceutical college, established in 1967, offers bachelor's and master's degrees and a diploma in pharmaceutical sciences. The Diploma in Pharmacy (D.Pharm) course and postgraduate degree in pharmacy (M.Pharm) were started in 1973 and 1984 respectively. The college includes departments of Pharmacology, Pharmaceutics, Pharmacognosy, Pharmaceutical Chemistry and Pharmaceutical Microbiology. The other facilities available are toxicology and animal labs, a drug-information centre, and morphine-tablet manufacture.



Fig 76: College of Pharmaceutical Sciences, Government Medical College, Thiruvananthapuram

5.11 Priyadarshini Institute of Paramedical Sciences (PIPMS)

Priyadarshni Institute of Paramedical Sciences was established in 1984 and offers Medical Laboratory Technology (MLT) courses to the students at both UG and PG levels. In 2011, a Postgraduate Block was established under the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY). As part of the second phase of the Master plan development, a new six-storey building was inaugurated by the Honourable Chief Minister of Kerala, Pinarayi Vijayan, in September 2025. Currently, the annual intake includes 44 students for DMLT, 26 students for the BSc MLT programme and 12 for the MSc MLT programme (in three disciplines – Biochemistry, Microbiology, and Pathology)



Fig.76: Priyadarshini Institute of Paramedical Sciences, Government Medical College, Thiruvananthapuram

5.12 Multidisciplinary Research Laboratory (MDRL) and Animal house

A state-of-the-art platform for motivating the medical fraternity and students in multidisciplinary research activities was established as part of a Central Government scheme approved in July 2013. The unit houses state-of-the-art molecular research infrastructure with funding support from the Department of Health Research (DHR) and the Government of Kerala. The centre consists of a Multidisciplinary Research Unit (MRU-ICMR), a Viral research and diagnostic lab (VRDL-ICMR), a Physiology research lab and multichannel data acquisition system, Lecture halls and an auditorium, a Zebrafish research facility with fully automated systems (the first of its kind in medical colleges in Kerala), a Molecular Diagnostic

(Cytogenetic) Facility, and CIFAR (Central Instrumentation Facility for Animal Research), which is currently under development. The COVID-19 diagnostic lab is currently functioning here. Over the past ten years, MRU has made significant contributions to the research endeavours of faculty members, staff, and students of the medical college. The unit has also standardised multiple molecular biology techniques, including PCR for confirming cutaneous T-cell lymphoma; PCR–sequencing for detection of microsatellite instability in colon cancer; and cost-effective protocols for detecting VHL single-gene mutations and Y-chromosome microdeletions in azoospermic males. Zebrafish-based protocols for assessing embryo toxicity and teratogenicity of new drug candidates, currently utilising the College of Pharmaceutical Sciences. Additionally, MRU has standardized methods for miRNA detection and quantification in ovarian tumours and point mutation detection for KRAS, MTHFR, and VEGF genes. As part of research on Rhinosporidiosis, the unit developed a novel protocol for isolating Rhino sporidium seeberi from clinical samples, recently published. MRU also completed the whole-genome sequencing of R. seeberi, with the sequence deposited in the NCBI database (Accession: Rhinosporidium seeberi RS Thiruvananthapuram; JBSSUT000000000; BioSample SAMN52481403). This marks the first genome sequencing of R. seeberi in the 125-year history of its research. A novel diagnostic kit for R. seeberi has also been developed, with the patenting process in progress through ICMR-MITRA. MRU is currently engaged in collaborative research with institutions such as the Central Tuber Crop Research Institute, Thiruvananthapuram; the Rajiv Gandhi Centre for Biotechnology, NIIST, Thiruvananthapuram; and the Sree Chitra Tirunal Institute of Medical Sciences and Technology. The cytogenetics facility under MRU has initiated karyotyping and genetic diagnostic services, and screening for rare genetic diseases is being conducted in collaboration with the Nidhan Kendra and Genetics Department of GMCT. MRU continues to standardise various molecular diagnostic techniques and implement them through its cytogenetics and molecular diagnostic facilities to enhance patient care. Furthermore, MD/M.Pharm, PhD students, postgraduate students, staff, and faculty members of Government Medical College, Thiruvananthapuram, regularly utilise the sophisticated equipment housed in MRU for their research needs.



Fig 77: Multi-Disciplinary Research Laboratory, Government Medical College, Thiruvananthapuram

5.13 Regional Institute of Ophthalmology

The regional Institute of Ophthalmology is the highest government-level referral hospital for eye care in Kerala. This institute originated as a government ophthalmic hospital in 1905 during the reign of king Sree Moolam Thirunal of Travancore; it became the department of ophthalmology. The hospital was upgraded to the Regional Institute of Ophthalmology (RIO) in 1995. Postgraduate courses in ophthalmology are offered, and a bachelor's-degree course in optometry is available with an annual intake of 20 students. It is a 250 bedded hospital offering specialised services including retina, paediatric ophthalmology, low vision, cornea and glaucoma clinics, an eye bank, tele-ophthalmology, a uvea clinic, a dispensing lab and contact lens and cataract clinics. Kerala's first mobile eye hospital, Sunayanam, operates from the RIO. **The School of Optometry** is on the RIO campus. A Bachelor of Science (Honours) degree in optometry is affiliated with Kerala University of Health Sciences. GMC Thiruvananthapuram is India's second government institute offering a four-year professional degree course in optometry



Fig 78: Regional Institute of Ophthalmology, Government Medical College, Thiruvananthapuram

5.14 Existing Infrastructure

5.14.1 Infrastructure and Master Plan

A comprehensive master plan, with a second phase currently underway at a cost of ₹717.29 crore, was launched to upgrade the institution into a centre of excellence. Phase-I projects, including road development within the campus, have been completed. with ₹18.60 crore

5.14.2 Major Constructions – Completed & Operational.

- Hospital block
- Academic and research blocks

5.14.3 Hostels Facilities

The ladies' hostel: The ladies' hostel was established as 4 blocks within the college campus

- ***The ladies' hostel block 1***

The main block (block 1), established in 1951 is three storeys with 178 rooms (including single, double, and triple rooms and dormitories) and accommodates 379 inmates. A mess attached with 3 dining halls, Gym facility and a 50 KWP Solar power system installed in 2023 are other facilities attached to the hostel.



Fig 79: Ladies hostel – Main Block, Government Medical College, Thiruvananthapuram

- ***The ladies' hostel block 2:*** This block was started in 2010 as a 3-storey building with 30 rooms (single and double rooms) and houses 132 students.



Fig 80: Ladies hostel, Block 2, Government Medical College, Thiruvananthapuram

- ***The ladies' hostel block 3:*** The block was established for accommodating PG students and was started in 2013 as a 3-storey building with 41 rooms (double rooms and 3 dormitories) and houses 183 inmates.



Fig. 81: Ladies Hostel Block 3, Government Medical College, Thiruvananthapuram

- **The ladies' hostel block 4:** Ladies' hostel Block 4 is a seven-storey residential facility under the Govt Medical College, Thiruvananthapuram, inaugurated on 11th March 2024 to accommodate female students of Pharmacy, Dental, Paramedical Programmes. The hostel has a capacity of 404 students. The block houses students from B.Pharm, BDS and allied health science courses, including BSc Medical laboratory Technology, Perfusion Technology, Dialysis Technology, Radiotherapy technology and Medical Imaging Technology.



Fig 82: Ladies hostel Block 4, Government Medical College, Thiruvananthapuram

- **New ladies' hostel:** A six-storey hostel building under construction to accommodate 404 students in 101 rooms with 12 toilet blocks, a reading room, a mess hall, a storeroom, and a kitchen.

Men's Hostel

Inaugurated on 4/12/1955, the Men's Hostel has a total capacity of 407 and caters to male students of MBBS, BDS, B. PHARM, BSc MLT, BSc Nursing and BSc Dialysis courses. A gym facility is also attached to the hospital.



Fig. 83: Men's Hostel, Government Medical College, Thiruvananthapuram

The Postgraduate Men's Hostel consists of 2 blocks. Block 1 has 149 rooms with 135 inmates. Block 2 has 53 rooms with 78 inmates



Fig 84: PG Men's Hostel, Government Medical College, Thiruvananthapuram

5.14.4 The Central Library

The Central Library, established in 1951, covers an area of 10,069 square feet. The Library boasts an extensive and comprehensive collection of volumes covering a wide array of fields in Medical Science & Technology. Our Library boasts an impressive collection of 49,404 books (including 40,925 general books and 8,479 book bank books) across various subjects, providing a rich resource for students and faculty. To further enhance our library's offerings, an annual budget of approximately One Crore is allocated for procuring a diverse range of

information sources, including books, e-journals, and e-books. All acquisitions are made based on valuable recommendations from Heads of Departments and library users.

A dedicated zone for the Digital Library, also known as the **Learning Resource Centre**, has also been established, catering to the evolving needs of modern students and offering access to a wealth of digital resources and knowledge. AKMG (Association of Kerala Medical Graduates (NRI)) donated LRC as a 50th birthday gift to the mother institution in 2002 with 20 computers networked and a broadband internet connection for providing online resources. The Digital Library serves as a hub for online learning and digital resources and offers access to a wide range of e-books, e-journals, and databases, such as Clinical Key, British Medical Journal Publishing, Cambridge University Press, Lippincott Williams & Wilkins, Oxford University Press, John Wiley, McGraw Hill, and other digital learning tools, providing an interactive and modern way to explore academic materials. LRC services and usages are managed and operated by Smart card system.

The library operates from 9:00 a.m. to 9:00 p.m. on all calendar working days



Fig. 85: Central library, Government Medical College, Thiruvananthapuram

5.14.5 NELS Skill Lab

The National Emergency Life Support (NELS) Program is a flagship initiative of the Ministry of Health and Family Welfare (MoHFW), Government of India, aimed at strengthening the emergency care response of the country. The programme was developed to provide standardised, India-specific emergency life support training for healthcare professionals. NELS focuses on the early recognition, resuscitation, stabilisation, and safe transfer of

patients with life-threatening medical and surgical emergencies. It follows a protocol-based, systematic approach to emergencies such as cardiac arrest, shock, trauma, respiratory failure, poisoning, snakebite, and obstetric and paediatric emergencies.

The programme is delivered through structured modules, hands-on skill training, simulations, and scenario-based learning at designated NELS Skill Centres established across medical colleges and hospitals. Training is provided to doctors, nurses, and paramedical staff, with an emphasis on teamwork and rapid decision-making. The primary goal of the NELS programme is to reduce preventable morbidity and mortality by ensuring that frontline healthcare providers across India are competent, confident, and uniformly trained in essential emergency life-saving skills.

At Government Medical College, Thiruvananthapuram, the NELS programme is currently in the implementation phase. The second phase of implementation is nearing completion, with significant progress achieved in infrastructure development, equipment procurement, and training preparedness. The institution is now awaiting initiation of the final phase, which will enable full operationalisation of NELS training activities and consolidation of emergency life support capacity.



Fig 86: NELS Skill lab, Government Medical College, Thiruvananthapuram

5.15 Infrastructure Projects (Ongoing & Completed)

PMSSY

- In 2011, a Postgraduate Block was established in the Priyadarshini Institute of Paramedical Sciences under the Pradhan Mantri Swasthya Suraksha Yojana (PMSSY).
- The IVF lab, theatre, IVF equipment and furniture was made available from PMSSY fund (reproductive medicine department)

NHM

- The laparoscopy unit setup in reproductive medicine (IVF lab) (2010-2012) was by NRHM fund
- New Mother and Child Block in SAT hospital: A new, multi-storey Mother and Child block has been constructed and inaugurated in February 2016 under the Sampoorana Arogya Keralam Project and National Health Mission (NRHM), with works for a ramp, fire staircase, and other essential systems funded by the Kerala Infrastructure Investment Fund Board (KIIFB) at an approved cost of ₹11.23 crore.

5.16 Major Renovations

Details included in Annexure 5

5.17 New Departments and Specialisations in Medical College:

Seating capacity of both undergraduate and postgraduate students increased, meeting regulatory norms of the National Medical Commission (NMC) and Kerala University of Health Sciences (KUHS). The number of MBBS seats increased from 200 to 250. The number of PG (MD/MS) seats increased from 218 to 248. Approval was granted for new postgraduate (PG) seats in Emergency Medicine, and DM programmes in Paediatric Nephrology and Pulmonary Medicine began. To improve the quality of service, training, research and innovations, staff positions also increased by creating 510 posts in clinical and non-clinical departments.

1. **Emergency Medicine & Trauma Care** – A new department of Emergency Medicine focusing on triaging patients efficiently has started functioning with postgraduate

courses, and a chest pain clinic and stroke care team have been established in the casualty wing.

- 2. The Critical Care Department** at Thiruvananthapuram Medical College (MCH) has established its first dedicated Critical Care Department in government hospitals, offering advanced life support with multidisciplinary teams and specialised ventilators, supported by high-tech facilities and trained specialists to provide comprehensive care for critically ill patients.
- 3. Medical Genetics Department** – The SAT hospital of the Medical College has established a Medical Genetics Department focused on rare diseases, providing Genetic Counselling & Diagnosis for congenital conditions, metabolic disorders, and family history concerns; molecular genetics with mutation analysis; Prenatal Testing to prevent transmission of genetic disorders; and Rare Disease Management with special focus on conditions like Muscular Dystrophy, Lysosomal Storage Disorders, and Ataxia.
- 4. Geriatrics Department:** Thiruvananthapuram Medical College Hospital (MCH) has established a dedicated Geriatrics Department in its new multi-speciality block, a first for a state hospital, aiming to provide comprehensive care focused on treating ailments, improving mental and physical recovery, and providing mental health support. for the elderly with dedicated wards, physiotherapy, and advanced training for staff, with the goal of improving quality of life and becoming a regional center for geriatric expertise. This initiative aims to move beyond generalised geriatric care to focused, holistic geriatric services for senior citizens in the region.
- 5. Stroke Centre:** A well-equipped advanced Stroke Centre with a dedicated Stroke ICU having advanced monitoring facilities, a CT Angiogram and a neuro CATH lab was established in June 2023 under the neurology department.
- 6. Skin Bank:** Kerala's first skin bank was inaugurated on July 15, 2025. Skin banks play a vital role in burn care, collecting, preserving, and transplanting donated skin tissue to treat severe burns. This provides temporary biological dressings for severe burns,

reduces pain, infection risks, and fluid loss, and improves graft outcomes, thereby preventing disfigurement and saving lives.

- 7. Diseased Donor Multi- Organ Transplantation Programme (DDMOTP)**, known as “Mrithasanjeevani”, started functioning from August 2012 and has attained record heights in just over 12 years with more than 913 organs shared from 323 donors statewide.

5.18 New Departments and Super Specialities in SAT hospital

The facilities at the Sree Avittam Thirunal (SAT) Hospital were expanded with new departments in paediatric cardiology, paediatric nephrology, Paediatric Gastroenterology, Neonatology and reproductive medicine have been established, new Paediatric neurology and nephrology wards, a paediatric gastro endoscopy unit and a Mother-Newborn care unit have been established.

- 1. Paediatric Intensive Care** facilities at SAT with an 18-bed critical unit and 32 bed step-down units with around 1500 admissions per year. Equipped with 19 ventilators, a bedside EEG machine, CRRT, and haemodialysis. Treatment achievements include 1st Paediatric ECMO in a state government-run medical College in the country, Survival of all 8 cases of amoebic meningoencephalitis and advanced high-end treatment for most of the critical illnesses in children
- 2. Foetal Medicine Department:** A dedicated foetal medicine department was established as a joint venture by SAT hospital and Child Development Centre (CDC). Foetal medicine focuses on the health of mother and fetus before, during and after pregnancy. This facility enables early detection and management of complications and disabilities of unborn babies
- 3. Human Milk Bank:** Kerala's third milk bank was established in September 2024 in collaboration with the Kerala State Women and Child Development Department and the National Health Mission, aiming to ensure the availability of safe, pasteurised donor human milk for neonates admitted to the hospital's intensive care units.

4. **Paediatric Cath Lab:** The first paediatric Cath lab in the public sector was established in SAT hospital on 1st September 2018 for providing affordable treatment for children with congenital heart defects.
5. **Paediatric Dialysis Unit:** The state's first dedicated paediatric haemodialysis unit in the public sector was established in the paediatric nephrology department in SAT hospital to provide both haemodialysis and peritoneal dialysis for children with kidney disease
6. **Paediatric Gastroenterology Department,** established in 2021 in SAT hospital making it a key public sector facility for advanced Paediatric GI care in Kerala,
7. **Spinal Muscular Atrophy (SMA) Clinic:** Kerala's first dedicated Spinal Muscular Atrophy (SMA) Clinic in the public sector was established in SAT hospital to provide specialised care, free medicines and surgeries for children with Spinal Muscular Atrophy. This is a Centre of Excellence for Rare Diseases

5.19 Equipment and Technology:

Advanced equipment was installed in departments such as Radiotherapy, Radiodiagnosis, Neurosurgery, Paediatric Cardiology, CVTS, Surgical Gastroenterology, Gynaecology, and Reproductive Medicine.

Major Equipment Installed are: A LINAC machine for advanced cancer radiation therapy was installed. A SPECT scanner was installed at a cost of ₹7.3 crore, along with a Telecobalt Machine, Cath Lab, Linear Accelerator, X-ray Digital Fluoroscopy, DSA, Refrigerated Centrifuge, Operating Microscope, Live 4D Echocardiography System, Ultrasonic Suction Aspirator, CT Stimulator, 3D Laparoscopic Set, USB Ultrasound Machine, High-end Ultrasound Machine, CT Angiogram, Videobronchoscope, Paediatric Cardiac Surgery Unit, Liquid Oxygen Plant at SAT, and High-End Ultrasonography Machine.

The Department of Nuclear Medicine is having a SPECT-CT scanner and low-dose radiation therapy. Scans routinely performed are Tc99m MDP Bone scan, Tc99m Pertechnetate thyroid scan, Tc99m DTPA scan, Tc99m DMSA scan, Tc99m EC renogram, Tc99m MIBI Parathyroid imaging, Tc99m MIBI Myocardial Perfusion imaging, Scan for Meckel's diverticulum, Hepatobiliary Scintigraphy, GI bleed study, GE reflux study (milk scan)

Lymphoscintigraphy and I-131 Whole body radioiodine scans, radioiodine (I-131) Ablation for thyroid cancer patients (low-dose therapy) and radioiodine (I-131) treatment for Hyperthyroidism. SPECT -CT scanner became operational in the Dept of Nuclear Medicine, Government Medical College Thiruvananthapuram, on 16th December 2024. A total fund of Rs. 7.27 crore for the project was sanctioned in 3 consecutive plan budgets, the last being in the financial year 2022-23. An Atomic Energy Regulatory Board (AERB) licence and Board of Radioisotope Technology (BRIT) approval were also obtained.

5.20 National Recognition:

- 1. National Institutional Ranking:** Government Medical College, Thiruvananthapuram Ranked 42nd in the National Institutional Ranking Framework (NIRF) under Ministry of Education in 2024 and sixth among the Govt Medical colleges in the country
- 2. Centre of Excellence for Trauma Care and Burns Treatment:** The emergency medicine department was designated as a Centre of Excellence for trauma care and burns treatment by the Union Health Ministry, one of only eight institutions in the country to receive this status.
- 3. Centre of Excellence (CoE) for Rare Disease:** In January 2023, SAT Hospital was notified as a Centre of Excellence (CoE) for Rare Disease Treatment under India's National Policy for Rare Diseases (NPRD)
- 4. Nodal Centre for Addiction Treatment Facility (ATF):** The Ministry of Social Justice and Empowerment had selected the Department of Psychiatry, Government Medical College, Thiruvananthapuram, as a Nodal centre for Addiction Treatment Facility (ATF).
- 5. KARSAP (Kerala Antimicrobial Resistance Strategic Action Plan) –** The State Nodal Centre is functioning in the department of Microbiology, involving multiple sectors, and it addresses a wide range of activities required to tackle Anti-Microbial Resistance problem effectively.
- 6. Nodal Drug Resistant TB Centre (NDR-TBC):** This nodal centre is located at Institute of Chest Disease Pulayanarkotta, under the Respiratory Medicine

Department of Government Medical College, Thiruvananthapuram. This centre is equipped to manage complicated cases of drug-resistant TB.

7. **MBFHI Certification:** Sree Avittam Thirunal Hospital received MBFHI certification in 2022 for being a Mother and Baby Friendly Hospital.
8. **LaQshya Certification:** In March 2024, the SAT hospital received national quality certification under the Union Health Ministry's 'LaQshya' initiative for the high quality of care and improved infrastructure in its labour rooms and maternity OTs.
9. **The Nodal Centre for Rare Blood Group Registry** has been functioning in the transfusion medicine department since 2022 with the purpose of registering donors with rare blood groups so that patients needing rare blood groups are connected with donors in medical emergencies.
10. **ADR Monitoring Centre:** Thiruvananthapuram Medical College is a designated centre for monitoring adverse drug reactions under India's Pharmacovigilance Programme (PvPI).
11. **National One Health Program Surveillance Centre:** Medical College Thiruvananthapuram is functioning as a sentinel site for surveillance of zoonotic diseases, functioning through the Departments of Community Medicine and Microbiology
12. **Regional Reference Laboratory for HIV Sentinel Surveillance:** For sentinel surveillance of HIV, Regional reference lab is established in the Department of Microbiology
13. **Sewage Treatment Plant:** A 5 MLD (million litres per day) sewage treatment plant has been established in the Medical College campus with financial support from the Central Government's AMRUT scheme and is now fully operational. Treated water from this facility is being reused within the campus for a range of non-potable applications. The Kerala Water Authority is in the final stages of replacing and rerouting the sewage outflow pipelines from SAT Hospital, the ladies' hostel and the Child Development Centre so that their sewage is safely conveyed to this new plant.

14. Incinerator For solid waste management in the hospital, a new incinerator system with a capacity of 150 kg per hour has been installed and commissioned. This facility is a major intervention that is expected to provide substantial relief from the hospital's waste-management challenges. The equipment for the project has been supplied and installed through KMSCL (Kerala Medical Services Corporation Limited).

15. Patient-Friendly Hospital under Aardram Project - Under the popular state government initiatives, an amount of 10 crore rupees has been sanctioned for the Aardhram project. The e-Health initiatives in the Medical College Hospital are being completed at a rapid pace. Aardhram is a patient-friendly hospital mission of the Government of Kerala, aimed at the comprehensive advancement of the state's health sector. Through Aardhram, the objectives are to enhance treatment facilities in government hospitals and to ensure maximum free treatment for the public. By making hospitals, from primary health centres up to medical colleges, more patient-friendly, the scheme seeks to guarantee high-quality health services.

5.21 Ongoing Major Developments

- Procurement and installation of a new MRI machine (₹8 Crores).
- Procurement of an ESWL machine (₹2.5 Crores) and a Gastroenterology Ultrasound machine (₹25 Lakhs) through HDS.
- PET CT scanner - Administrative sanction has been accorded for the purchase and installation of a PET - CT scanner in Medical College Hospital Thiruvananthapuram at a cost of Rs 15 Crores on a turnkey basis, which is the first Digital PET CT scanner in Government Medical Colleges in India. The sanction is accorded to construct the civil work of 4000 sq. ft. of building space in the Heritage block of the Medical College, Thiruvananthapuram, above the Radiotherapy Bunker space and service area adjacent to the Nuclear Medicine Department in consultation with the PWD for the installation of the PET CT scanner. Work order was issued to Boston IVY healthcare solutions Pvt LTD and the work started on 19/09/2025.

- As per the Master plan, a proposal is already under consideration for the construction of a high-dose therapy ward with financial Sanction from KIIFB (Rs.47,127,407.42) in the heritage block of Medical College Hospital.

5.22 Ongoing infrastructure works

- Construction of ramp for connecting first and second floors near labour room of SAT Hospital, Government Medical College Thiruvananthapuram – General Civil work worth ₹1.5 Cr,
- Repair and Maintenance of D 32 Quarters for ₹5.9 Lakhs,
- Daily operation of Electrical installation installed in Multi-specialty block ₹4.4 Lakhs,
- Daily Operation of Electrical installation installed in Super Speciality Block for ₹5.7 Lakhs,
- SITC of Air conditioning in Conference Hall Superintendent's office at OPD ₹4.8 lakh,
- SITC of bed com 26 passenger lift installed at the main entrance for ₹41.4 Lakhs,
- Electrification of newly installed 30 KVA UPS at first floor of Blood Bank, ₹1.6 Lakhs,
- Repair of water supply arrangements and allied works in the MCH ₹14.5 Lakhs,
- Repair of water supply arrangements various institutes attached to the college: ₹12.5 Lakhs,
- Repair of water supply arrangements and allied works in super specialty Block & Multi Speciality Block: ₹8.9 Lakhs
- Repair of water supply arrangements attached with SAT Hospital ₹14.5 Lakhs
- Repair of water supply arrangements and allied works in Dental College, the men's hostel and nearby buildings of medical college: ₹13 Lakhs
- replacing water tank in the ladies' hostel for ₹3.8 Lakhs
- Urgent cleaning the sumps and OHSR ₹1.5 Lakhs

- Running contract for emergency work to be done for Multi-Specialty Block for ₹5 Lakhs

5.23 Future Projects / Proposals

- New Paediatric Block at SAT Hospital under Master Plan.
- Multi-level car parking is under construction at Medical College Hospital.
- New Infectious Disease Block is under construction.
- Installation of advanced equipment for departments like Organ Transplant, Neurology, Urology, Radiodiagnosis, Paediatric Cardiology, and Gynaecology, High-end Multiparameter Monitors, Paediatric Laparoscopy & Thoracoscopy, Endobronchial Ultrasound, Anaesthesia Workstation, Committed Neonatal Ventilator, PET CT, Digital Radiography, Ultrasound Machines, Mobile Digital Radiography
- New Medical Facilities & Equipment (Announced August 2025): Projects worth ₹180 crore have been launched across the campus.
- A new Operation Theatre (OT) block with 14 OTs, 145 beds, 16 intensive care units, and a Cath lab under construction
- Imageology division equipment, including MRI, CT scanners, and various digital radiography units worth ₹43.9 crore.
- Revamped paediatric neurology and nephrology wards, a paediatric dialysis unit, and the public sector's first Paediatric gastroendoscopy unit.

Future plans:

The future is focused on continuous technological upgrades, expansion of clinical departments like the critical care department, Establishment of Pulmonary Medicine, development of surgical blocks, construction of the Department of ladies hostel and modernisation of existing facilities to meet growing demands. Upgrading of the institute to centre of excellence having Access to cutting-edge technology, diagnostics, and treatment options, providing specialized care in collaboration with different departments

CHAPTER- 6

SPECIAL SCHEMES

6.1 Introduction

Government Medical College, Thiruvananthapuram, actively implements various state-sponsored health assurance schemes to provide financial protection and access to advanced care for eligible beneficiaries. KASP (Karunya Arogya Suraksha Paddhati) is Kerala's flagship health scheme to mitigate catastrophic health expenditure of economically weaker sections of Kerala. KBF (Karunya Benevolent Fund) is a state government scheme funded by lotteries, providing financial aid for poor individuals with serious illnesses. Arogyakiranam provides free treatment for all children up to the age of 18 years. E-Sanjeevani telemedicine facilitates quick and easy access to doctors and connects rural patients with specialists.

6.2 Government Schemes Implemented

The institution is a major empanelled provider under the following schemes.

Table 33: Government Schemes Implemented, Government Medical College, Thiruvananthapuram

Sl no:	Name of the Scheme	Description
1	KASP (Karunya Arogya Suraksha Paddhati)	Offers ₹5 lakh annual coverage per family for economically weaker sections at empanelled public/private hospitals, providing cashless treatment for major diseases like cancer, heart issues, and kidney problems, with kiosks at hospitals for enrolment and support, covering pre/post-hospitalisation costs.

2	KBF (Karunya Benevolent Fund)	A state government scheme funded by lotteries, providing financial aid for poor individuals with serious illnesses (Cancer, Kidney/Heart issues, Haemophilia) for treatment at empanelled hospitals, with cashless pre-hospitalisation care and treatment including medicines for 15 days post-discharge.
3	Arogyakiranam	Provides free treatment for all children up to the age of 18 years in Government hospitals. It provides free investigation, treatment, and medicines for all health conditions, including complex issues like cancer and heart disorders, through both Outpatient (OPD) and Inpatient (IPD) services.
4	Rashtriya Bal Swasthya Karyakram (RBSK)	The RBSK is a national initiative under the National Health Mission (NHM) aimed at screening children from birth to 18 years for 32 specific health conditions, categorised into "4 Ds": Defects at birth, Diseases, Deficiencies and Development delays including disabilities. The Medical College, Thiruvananthapuram, functions as one of the key tertiary-level centres for referred cases from primary and secondary care centres as well as from communities. The referred children will receive confirmatory diagnoses and specialist medical and surgical management, including treatment for congenital defects, cardiac cases, etc., at no cost to the family
5	Sruthitharangam	A flagship Kerala government initiative under the State Health Agency (SHA) started in 2023-24, providing cashless cochlear implantations and auditory verbal habilitation services for young children of 0-3 years with

		profound hearing loss. A state-level technical committee will oversee implementation of this programme.
6	The MEDISEP program	The Medical Insurance Scheme for the State Employees and pensioners (MEDISEP) was implemented with effect from 1st August 2019 with the finance department, the administrator of the programme. Thiruvananthapuram Medical College, being an empanelled hospital in this scheme, providing cashless treatment to beneficiaries
7	Thalolam scheme	A Kerala government initiative under social security mission launched on 1st January 2010 for free treatment for children under 18 with specific serious illnesses, which includes Thalassemia, Hemophilia, Cerebral Palsy, Kidney Diseases, Cardiovascular Diseases, Congenital Anomalies, and accident cases needing surgery, particularly those belong to below Poverty Line (BPL) category
8	Sukrutham scheme	A Kerala government initiative launched in 2014 to ensure accessible and affordable cancer care for economically weaker sections of society. Through this scheme, Below Poverty Line (BPL) patients registered are entitled to get various aspects of cancer care, namely surgery, radiation, and medication, with a maximum benefit up to Rs 3 lakhs

**Table 34: Number of Beneficiaries who availed service during the last 5 years,
Government Medical College, Thiruvananthapuram**

Scheme	2020-21	2021-22	2022-23	2023-24	2024-25
KASP	25257	41146	44676	41814	55370
KBF	332	1612	1530	848	1554
RBSK	453	903	1064	375	203
Arogyakiranom	80	34	104	216	225
Sruthitharangam	-	-	-	96	52
The MEDISEP program	-	-	1553	1672	2588

6.3 Department-led Public Health and Special Programs

1) PEID Cell

The State PEID Cell functions under the control of the Principal, Govt. Medical College, Thiruvananthapuram, with statewide jurisdiction. The Professor and Head of the department of community medicine is the coordinator and in charge of the State PEID Cell. At present, there are 12 Regional PEID Cells attached to the Community Medicine Departments of Government Medical Colleges. The State PEID coordinates the prevention, control, and surveillance activities of communicable diseases; awareness programmes; training programmes; health education activities; infection control activities; waste management activities, including biogas plant and incinerator; and clean campus campaign programmes of Govt. Medical College, Thiruvananthapuram.

2) National Medical College Network (NMCN)

This is a Central Government (MOHFW) scheme for interlinking the Medical Colleges across the country with the purpose of e-Education and the National Rural Telemedicine Network (NRTN) for e-Healthcare delivery. Government Medical College, Thiruvananthapuram, has been identified as a Regional Resource Centre (RRC) – South II, as part of this scheme. As a part of being an RRC, other institutions under the RRC are Govt. Medical College, Kozhikode; Karnataka Institute of Medical Sciences, Hubli; Mangalore; and National Institute of Mental Health and Neuro Sciences (NIMHANS), Bangalore.

Objectives

- The purpose of the project is to create e-learning content for the purpose of undergraduate medical education.
- The RRC is supposed to co-ordinate and submit content for this purpose.
- Telemedicine activities
- Teleconsultation activities.

A fund of INR 64.05 Lakh has been granted by the Ministry of Health, Govt of India. G.O.(Rt)No.561/2025/H&FWD Dated, Thiruvananthapuram, 26-02-2025. MCH has conducted interviews for the following positions: 5 posts (telemedicine manager, website designer, content creator, administrative assistant). MCH has taken quotes from Keltron and PWD regarding the development of the Telemedicine Lecture Hall and Telemedicine Unit. The quotes are under review, and we will be finalising the vendors soon.

GMC Thiruvananthapuram is proceeding with the infrastructure development and equipment installation in the coming weeks. NMCN Team is working closely with the vendors to ensure timely completion of the project.

3) Setting up of Skill Centre at Govt. Medical College under the project “Human Resource Development for Emergency Medical Services”.

The scheme envisages equipping the various medical persons with necessary skills to function effectively. For training medical professionals in emergency healthcare, GOI implemented this scheme. The establishment of the skill development centres was

necessitated by increasing accidents and lurking dangers of natural disasters in the state. "Training and skill building of health professionals is an important component of healthcare, which can be achieved in these centres. The skill development centres would help in training midwives to provide effective care and also expose doctors to new techniques in healthcare. As per the letter No. Z 14013/2/2019-EMR dated 26/02/2019 Govt. of India has released the 1st instalment of Grant-in-aid of Rs.1.4 crore for setting up of Skill Centre in Govt. Medical College Thiruvananthapuram for the construction of the infrastructure of the skill Lab. As per the specific plan and instructions from DGHS, PWD completed the work in 2023. As per the Letter No. Z.28015/77/2022-DMCell dated 17.10.2024, the Government of India has sanctioned a grant-in-aid of Rs. 1,50,00,000/- as the second instalment for mannequins , equipment Furniture and others. G.O.(Rt) No. 1594/2025/H&FWD Dated 09-06-2025, Administrative sanction received for the procurement of equipment, and the procurement process is going on.

4) Addiction Treatment Facility (ATF)

The Ministry of Social Justice and Empowerment had selected the Department of Psychiatry, Government Medical College, Thiruvananthapuram, as a Nodal centre for the Addiction Treatment Facility (ATF).

As per the Govt. letter No. Pl/152/2025/Health dated 21/06/2025 and order no. PA2/1015/2025/DME dated :12/07/2025 permission has been granted to Principal GMCT to make appointments to various posts on a contract basis to the ATF. An amount of Rs-42,00,000/- was allotted for the implementation of the scheme. The recruitment process is going on.

5) National Programme for Health Care of Elderly (NPHCE)

The National Programme for Health Care of the Elderly (NPHCE) is an articulation of the International and national commitments of the Government as envisaged under the UN Convention on the Rights of Persons with Disabilities (UNCRPD), the National Policy on Older Persons (NPOP) adopted by the Government of India in 1999 and Section 20 of "The Maintenance and Welfare of Parents and Senior Citizens Act, 2007", dealing with provisions for medical care of Senior Citizen.

The programme is envisaged to provide promotional, preventive, curative and rehabilitative services in an integrated manner for the Elderly in various Government health facilities. The range of services will include health promotion, preventive services, diagnosis and management of geriatric medical problems (out- and inpatient), day care services, rehabilitative services and home-based care as needed. Districts will be linked to Regional Geriatric Centres for providing tertiary-level care. Under this scheme, the Regional Geriatric Centre was established with 2 geriatric wards, OP, Physiotherapy unit, Training and Lecture Hall. Regular training programmes were conducted in the Government old age home in Pulayanarkotta. The total of ₹ 4,36,54,230 received since 2011-12 and the expenditure made was ₹ 3,77,55,722

6) Implementation of National Program for Prevention and Control of Deafness (NPPCD)

The Medical College, Thiruvananthapuram, through its ENT department, is providing technical expertise, specialised services, and training to support the statewide implementation of the NPPCD to reduce the burden of deafness in Kerala.

7) National Mental Health Programme (NMHP)

It is estimated that 6-7% of the population suffers from mental disorders. These account for 12% of the Global Burden of Disease (GBD). The WHO report 2001 states that one in four families is likely to have at least one member with a behavioural or mental disorder. Most of them (>90%) remain untreated. Poor awareness about symptoms of mental illness, myths & stigma related to it, and lack of knowledge on the treatment availability and potential benefits of seeking treatment are important causes for the high treatment gap. Considering the shortage of manpower in mental health, manpower development schemes have been approved for the 11th Five-Year Plan. This includes establishment of centres of Excellence by upgrading and strengthening, identifying existing Mental Health Hospital/Institute, Man Power Development upgradation of psychiatric wings of Medical Colleges etc. The proposal submitted by the Dept. Of Psychiatry, Medical College, Thiruvananthapuram, was accepted, and a total outlay of 294 Lakhs was planned; of this, 173.66 Lakhs was sanctioned. Till 15/3/2021, 94.69 lakh was expended.

Facilities for the Lecturer Hall, Play therapy room, Demonstration Hall, and Library Classrooms have been made available. Photocopiers and printer machines, LCD projectors, Sound systems, Trolley Speakers, refrigerators, Psychometric Tools, Play Therapy materials, Library Books, Transcranial Direct Stimulation Machine, Water Purifier, 2 TVs, Suction Apparatus, Public Addressing System and Accessories, Laryngoscope Fibre Optic (Child & Adolescent), ECG monitors, Pulse Oximeter, LCD projectors, Food Medicine Trolley and Restraint Beds have been procured. Though 75% of the project was completed, we could not proceed further. UC submitted. A request was sent to the Government through the Director of Medical education for the permission to refund the balance amount to GOI, stating the reasons for not starting the MPhil course in clinical Psychology and psychiatric Social Work.

Table 35: Fund details of National Mental Health Programme Government Medical College, Thiruvananthapuram

Fund received	Interest	Total	Expenditure	Balance
1,73,66,000	31,17,631	2,04,83,631	95,94,883	1,08,88,748

8) Centre of Excellence in Rare diseases, SAT Hospital, Government Medical College:

The National Policy for Rare Diseases (NPRD), 2021 was published on 30th March 2021 with the aim of lowering the incidence and prevalence of rare diseases based on an integrated and comprehensive prevention strategy and providing financial assistance to the patients suffering from these diseases within the constraints on resources and competing healthcare priorities. As per the policy, the Government will notify selected Centres of Excellence, which will be premier Government tertiary hospitals with facilities for the diagnosis, prevention and treatment of rare diseases. As per the office memorandum from ministry of health (P-18012/11/2022-EPI/RD) dated 26-12-2022, SAT Hospital, Government Medical College, Thiruvananthapuram, has been included in the list of Centres of Excellence (CoE) in rare diseases. The responsibilities and activities of the COEs would be as follows:

- Education & Training at all levels

- Screening – Antenatal, neonatal (specified disorders), High risk screening (Both antenatal & in newborns and children)
- Diagnostics – Cytogenetic, molecular, Metabolic
- Prevention by prenatal screening & diagnosis
- Research in the area of low-cost diagnostics & therapeutics.
- Treatment of rare diseases

Fund details:

1. Grant in AID received for infrastructure development (for equipments in genetic Lab)

TOTAL fund is 5 Cr.

- Received in 2023-2024 is 3 CR as per W/11037/29/2023-RD dated 1.06.2023. Utilised the amount 2,79,65,960 for purchasing equipment through KMSCL. Money transferred to KMSCL and purchase process is ongoing and will be completed this year
- Received in 2024-2025 is 2 CR on 12.03.2025 and the requirements with specifications are submitted to Principal office. UC dated 11.6.2025 submitted to the ministry

2. For the treatment of patients affected with rare diseases – 2nd instalment of 5.97 CR (on 16.10.2024). As per the last UC on 15.4.2025, the balance amount is 4.21 CR. Expenditure after this is approximately 1.2 CR. The balance fund is using for medicine and other treatment purposes for rare diseases

3. For the consumables, 33 lakhs were given. Utilizing the amount (at various stages of purchase)

4. For awareness creation- WORKSHOP conducted, 1 lakh was completely utilised and a UC was submitted

9) National Programme for Prevention and Management of burn Injuries (NPPMBI)

In view of the rising number of deaths due to burn injuries, a project was initiated during the 11th Five Year Plan by the Directorate General of Health Services, Ministry of Health &

Family Welfare, for the development of burn units in identified Medical Colleges and District Hospitals. The project is now being continued as a full-fledged National Programme in the name of the National Programme for Prevention & Management of Burn Injuries (NPPMBI) during the 12th Five Year Plan.

Objectives of the programme:

- To reduce incidence, mortality, morbidity and disability due to Burn Injuries.
- To improve the awareness among the general masses and vulnerable groups, especially the women, children, and industrial and hazardous occupational workers.
- To establish an adequate network of infrastructural facilities along with trained personnel for burn management and rehabilitation.
- To carry out research for assessing behavioural, social and other determinants of Burn Injuries in our country for effective need-based programme planning for Burn Injuries, monitoring and subsequent evaluation.

GOI has allotted Rs 3,94,74,000 /- for non-recurring and recurring component of the total of Rs 6.579 Cr of NPPMBI (Central share – Rs 2,07,90,000/- For construction and equipment for Rs 1,86,84,000/ for manpower and State share- Rs 1,38,60,000/-for construction and equipments, Rs 1,24,56,000/- for manpower). Fully operational burns ICU has been functioning since 23/11/2022 between wards 7 & 8 of Medical College Thiruvananthapuram. The Skin bank equipment procurement has been completed and has been made functional. Work for the burn step-down unit with Procedure room and isolation room is in progress. Letter No. Z.2801 5/41/2015-MH HI dated 22.02.2024 & G.O (Rt) No. 1116/2024/H&FWD dated 06.05.2024. 3.114 Cr allotted for manpower support for 3 years. 35 posts were created on a contract basis, and 15 staff are now working in the scheme. Necessary steps are being initiated for procuring the remaining manpower.

Table 36: Fund details of National Programme for Prevention and Management of burn Injuries

Component	Fund received		Fund utilized		Balance	
	GoI	GoK	GoI	GoK	GoI	GoK
Construction & equipment	2.079 cr	1.386 cr	NA	0.946 cr	nil	0.44 cr
Manpower	1.868 cr	1.245 cr	0.119 cr	0.0794	1.749 cr	1.1656cr

Centre of Excellence for NPPMBI

The Ministry of Health and Family Welfare is implementing the Programme, "National Programme for Prevention & Management of Trauma and Burn Injuries" (NPPMT&BI) across the country to reduce the mortality and morbidities occurring due to injuries (including trauma and burns) by developing a system of services at the pre-hospital & hospital level and a continuum of care. D.ONo.V.23017143/2023-HII(Pt). Dated: 06.01.2025. Government Medical College, Thiruvananthapuram, Kerala, selected as Centre of Excellence under the Government of India's Programme on Prevention and Management of Trauma and Burn Injuries. Funding will be 100% from the Central Government. 1.2Cr allotted in the scheme. The fund has been allocated for following purposes:

- a. Hand-holding for the other medical colleges and district hospitals for clinical care, academic & research;
- b. Training and skill development: Making Training for Trainers (ToT) for various training programmes, becoming training hub for NELS (paramedic, nurses and doctors) and other capsule courses for acute care;
- c. Promote innovation, research and technology in clinical care
- d. Develop and share best practices with other medical colleges and district hospitals
- e. Awareness and IEC, Equipment specifically used for Trauma/Burns Units or any other activity pertaining to trauma and burn care.

As per the G.O.(Rt)No.1858/2025/H&FWD dated 05-07-2025 administrative sanction was received, and the procurement process is going on.

10) Capacity Building for developing Trauma Care Facilities on National Highways

The MoHFWD started a pilot project (1999) during the Ninth five-year plan to augment and upgrade the accident and emergency services in selected State Govt. hospitals that are located in the most accident-prone areas of national highways. The scheme envisaged providing financial assistance for upgrading emergency services of selected Government hospitals. This project is considered a major stepping stone in moving towards the desired objective of bringing down preventable deaths in road accidents to around 10%.

The main objectives of the scheme

- Ensure definitive treatment for the injured within the Golden Hour
- Basic Life Support Ambulances at every 50km along the Highways
- Designated Trauma Care Facilities, viz., Level I, II & III - at every 100 km on the highways by upgrading the existing government healthcare facilities to the appropriate level in terms of Infrastructure, Equipment & Manpower
- Advanced Life Support Ambulance at Trauma Care Facilities for inter-facility transfer
- Integrated communication network to enable the public to reach the Trauma Care System and for the various components of the System viz. trauma centres, Ambulances, etc., to interface with each other. Appropriate skill training for various Human Resources viz. Doctors, Paramedics, etc., working in the Trauma Care System.
- To develop a National Injury Surveillance System & Trauma Registry
- To spread awareness regarding injury prevention and road safety

Table 37: Fund details of Capacity Building for developing Trauma Care Facilities on National Highways

Component	Fund received		Fund utilized		Balance	
	GoI	GoK	GoI	GoK	GoI	GoK
Construction & equipment	4.5 cr	3cr	4.5 cr	2.17 cr	nil	0.83 cr
Manpower	1.6632 cr	1.1088 cr	1.097 cr	0.7319	0.565 cr	0.376 cr

Trauma Care Facilities fully functional since 07 July 2021. 29 staff are now working in the Scheme.

6.4 Research and Surveillance Programs

1. Multi-Disciplinary Research Unit (MRU)

In 2013, the Department of Health Research (DHR), Ministry of Health and Family Welfare, Government of India, sanctioned the Multidisciplinary Research Unit (MRU) at Government Medical College Thiruvananthapuram. Since then, it has actively participated in different research activities, as well as giving assistance and training to the faculty and staff of the Govt. Medical College, Thiruvananthapuram. The facility was established in 2015, and the MRU lab shifted to a new research laboratory within the MDRL building in November 2018. The facility currently has almost all sophisticated equipment, and the laboratory can undertake molecular research in advanced and most modern areas of basic science and clinical research. The findings from different research projects of MRU were published in reputed journals or presented at various national and international conferences.

The Local Research Advisory Committee (LRAC) of MRU has selected 19 research proposals from medical college faculty members and completed 12 projects. Seven projects are currently ongoing. Eight extramural projects and 29 PG/MD students were used in this facility for thesis work. We organised 17 training programmes for human research

development, in which 147 staff members/students participated. In 2020, MRU established a state-of-the-art Zebrafish Research Facility for undertaking studies using zebrafish as a model organism; this facility is the first of its kind in Kerala. In 2024, we also set up a "Cytogenetic Research Facility" to focus on rare genetic diseases. The establishment of a Central Instrumentation Facility for Animal Research is now underway at MRU.

2. Kerala Antimicrobial Resistance Strategic Action Plan (KARSAP)

Antimicrobial resistance (AMR) is a growing threat to public health which needs urgent attention. The Government of India initiative to combat this problem, the National Programme on Antimicrobial Resistance Containment, was launched in 2013, during the Twelfth Five-Year Plan (2012-2017). This programme, coordinated by the National Centre for Disease Control (NCDC), New Delhi, aims to capture quality AMR surveillance data from sentinel surveillance sites to generate evidence of AMR prevalence in the country to guide the National Action Plan on AMR. **Kerala Antimicrobial Resistance Strategic Action Plan (KARSAP)** was the first subnational State action plan on AMR conceptualised in India. It was launched by the Honourable Chief Minister of Kerala, Sri Pinarayi Vijayan, on 25 October 2018. The KARSAP identified AMR surveillance as a strategic priority in line with national and global AMR action plans. **Kerala Antimicrobial Resistance Surveillance Network (KARS-Net)** was established in 2018 to estimate the extent, burden and monitoring of AMR in Kerala with the Department of Microbiology, Government Medical College, Thiruvananthapuram, as the state nodal centre.

The objectives of the network were to foster standardisation, to strengthen and expand AMR surveillance in Kerala, to analyse and report KARS-Net data to State Government and NCDC on a regular basis, to contribute towards the estimation of the extent, burden and monitoring of AMR in Kerala and to detect emerging resistance and its spread in Kerala. From 2019, with the technical support from the World Health Organization (WHO) and the National Centre for Disease Control (NCDC), the network has now expanded to 59 laboratories from both the public and private sectors (12 government medical college hospitals, 14 government hospitals/laboratories under the Directorate of Health Services, 5 semi-autonomous institutions, 20 private medical colleges and 8 private hospitals/laboratories). The network utilises WHONET to collate, analyse and share AMR data on a monthly basis. All the

participating network sites report the monthly AMR data of the nine priority pathogens from specific specimen types to the Department of Microbiology, Government Medical College, Thiruvananthapuram. Feedback for the data submitted every month is provided using a standardised feedback tool to improve the completeness and quality of AMR data.

The network sites are mandated to implement internal quality control as an essential component of quality assurance in antimicrobial susceptibility testing and also participate in the External Quality Assessment Scheme (EQAS). Continuous support is provided to the programme sites to improve specimen collection, bacterial culture, identification of pathogens and their antimicrobial susceptibility testing (AST), which includes provision of continuous virtual and/or hands-on training.

Onsite support visits and onsite training are also conducted for handholding the sites to strengthen bacteriology laboratory capacity by improving the quality of culture and AST practices. In addition, training and workshops on WHONET software to streamline AMR surveillance data flow from network sites are regularly organised. Online capacity-building sessions were also held during 2019 for standardisation of techniques for clinical specimen collection, bacterial culture, identification of pathogens & their AST, including frequent troubleshooting sessions for WHONET data management. Onsite support visits were also conducted in 2021 and 2022 for streamlining AMR surveillance data management and to assess the training needs. Hands-on training on antimicrobial susceptibility testing with emphasis on the broth microdilution (BMD) method and WHONET training was conducted at Government Medical College, Thiruvananthapuram, for the new member sites in 2023 and 2024. AMR surveillance under KARS-Net includes standardised collection, collation, analysis and compilation of AMR data from all the network sites. The compiled data is used to generate the **Annual State AMR Surveillance report**, which is shared with all the network sites under KARS-Net and with the stakeholders at the State level. The data generated by KARS-Net is shared with NCDC for submission to WHO's Global Antimicrobial Resistance Surveillance System (GLASS) from 2021 onwards.



Fig 87: Release of Annual State AMR Surveillance Report 2024



Fig 88: Hands-on training on antimicrobial susceptibility testing with emphasis on the broth microdilution (BMD) method and WHONET training.

3. National One Health Programme for Prevention and Control of Zoonoses (NOHPPCZ)

NOHPPCZ is a central sector scheme of the Ministry of Health and Family Welfare (MoHFW) approved in the 12th Five-year Plan as “Strengthening Inter-Sectoral Coordination for Prevention and Control of Zoonotic Diseases”. The nodal agency for implementation for the programme is NCDC, MoHFW, Govt. of India.

The programme was started in GMC Thiruvananthapuram in 2022-2023. The programme was initiated with an objective to strengthen intersectoral coordination among the medical, veterinary and wildlife sectors to address zoonoses through joint capacity-building

activities, lab strengthening of the States for zoonoses, strengthening surveillance, data sharing and joint outbreak investigation and undertaking various Information, Education and Communication (IEC) activities. The objectives of the programme are being performed successfully in this institute by the joint venture of Departments of Microbiology, Community Medicine, Infectious Diseases, Paediatrics and Pathology. The programme was implemented in 2022-23 with an initial grant of Rs 16,30,000/-.

4. Viral Research and Diagnostic Laboratory (VDRL)

The present scenario of increasing outbreaks of new viral diseases and lack of organised facilities for diagnosing viral diseases has paved the way for implementing a scheme titled “Establishment of Network of Research Laboratories for Managing Epidemics and Natural Calamities” by DHR/ICMR. As a part of this, ICMR invited project proposals from Govt. Medical College Thiruvananthapuram in July 2013 and the proposals were submitted in the prescribed format. The project was approved by ICMR/DHR on 20th February 2014.

An amount of Rupees One crore Twenty-nine Lakhs (1st instalment) was sanctioned by ICMR for establishing Medical College-level Viral Research and Diagnostic Laboratory (VRDL) under the approved scheme of the DHR, Ministry of Health & Family Welfare, Govt. of India, in December 2014 (No.VIR/40/2013/ECD-I dated 10/12/2014). A Memorandum of Agreement (MoA) was signed by DHR/ICMR and the Health and Family Welfare Department, Kerala, later in the given format in February 2015. The Administrative sanction for the above allotted instalment was accorded in October 2015 by the Govt. of Kerala, H&FWD (GO.(Rt) No.3209/15/H&FWD dated 1/10/2015).

The laboratory started to function fully in the year 2015 by the month of August after getting academic sanction from the Government of Kerala. From there on for the past ten years we have been involved in the serological diagnosis of different viruses. We have also undertaken research projects as part of the MD Microbiology course thesis. We do have collaborative projects with other ICMR institutes for Leptospirosis and Scrub typhus. During the Covid-19 pandemic our VRDL stood in the forefront in the state of Kerala in the diagnosis of the infective virus. We were the second lab in the state after NIV, Alleppey, to start Covid-19

testing. We are one of the labs that won the Best Team Research Award at the DHR-ICMR HEALTH RESEARCH EXCELLENCE SUMMIT 2024). Schemes in VRDL:

Scheme 1: “Setting up of Nationwide Network of Laboratories for Managing Epidemics and National Calamities”.

Scheme 2: Prevention & Control of Diseases – “Development of Tools to Prevent Outbreak of Epidemics”

6.5 Community Outreach Activities

1. Family Adoption Program (FAP) is an initiative for MBBS students in India, designed to enhance healthcare and encourage community well-being. It is a distinctive component of the medical curriculum, offering students early exposure to the community, introducing them to rural life in our country, and providing health support to underserved communities. Incorporating community engagement into medical education allows students to understand how public living conditions impact their health. Community Medicine departments achieve this through practical field experience and studies on family health.

The 2021 admission batch adopted families from ward 10 of the Thiruvananthapuram corporation named Powdikonam, is under Uliyazhathura village. This ward covers a population of 8210 (3960 males and 4250 females) and is 10 kilometres away from the institution. Nearest JAK Powdikonam (JAK) and Panavila (JAK). Two hundred and fifty families adopted from this area.

The 2022 admission batch adopted families from ward 96 of the Thiruvananthapuram corporation named Akkulam ward, coming under Cheruvakkal village. In this area resides a population of 8170 including 3858 males and 4312 females. The distance from the medical college to the village is 5 kilometres. The nearest health facility in this area is Theruvikkal (HWC). Two hundred and fifty families adopted from this area.

The 2023 admission batch adopted families from ward Chempazhanthi, Thiruvananthapuram corporation. Population in the ward is 10673 (5084 males and 5589 females). Nearest health facility is Powdikonam (JAK). These wards are 9 kilometres from the institution. Two hundred and fifty families adopted from this area.

2024 admission batch – The proposed area of family adoption for this batch is ward 99 Poundukadavu of Thiruvananthapuram corporation occupying 8484(4008 males and 4476 females) and 2400 houses. These wards are 5-6 kilometres from the institution. The nearest health centre is FHC Veli.

2. Health education sessions

The Department of Community Medicine also conducts health education sessions as part of community outreach programmes.

3. Outreach OP Services of the Dept of Paediatrics: Conducted weekly at Rural Health training Centres in Vakkom and Integrated Family Health Centre, Pangappara, extending paediatric care to the community.

4. Outreach activities of the Department of Psychiatry:

The department has conducted more than 500 mental health awareness programmes through seminars, workshops and media programmes for the public.

Faculties of Psychiatry has provided several services as Expert committee member in Kerala State Planning Commission for Child health and development Chairman of Expert Committee which prepared “Parenting Training Module” for State Council for Education Research and Training, Expert Member of committee which prepared “Ullasaparavakal” - the first life skills education module in Malayalam published by SCERT Tvm, Expert Member of drafting committee for new Anti-Ragging Rules” by Government of Kerala as instructed of High Court of Kerala and Guest Faculty Kerala Judicial Academy High Court of Kerala, Institute of Management in Government, and State Institute of Health and Family Welfare

5. Under the DRP, 300 postgraduate students provide clinical services in peripheral areas.

6.6 Academic and Clinical Support Initiatives

New PG courses in Medical Genetics, Geriatrics, Critical care and Interventional radiology are being planned.

6.7 Summary

Government Medical College, Thiruvananthapuram, functions as a leading tertiary care hospital actively engaged in implementing state and national health programmes aimed at improving healthcare. The college is a major empanelled provider for government health assurance schemes such as KASP, Karunya Benevolent Fund, and Arogyakiranam, ensuring access to advanced medical care for economically weaker sections, children, and rural populations.

The institution plays a pivotal role in public health initiatives, such as the State PEID Cell for communicable disease surveillance and infection control, and participates in national programmes such as NMHP, NPHCE, NPPCD, NPPMBI and trauma care capacity building. It also contributes significantly to research and surveillance through units like the Multi-Disciplinary Research Unit (MRU), Viral Research and Diagnostic Laboratory (VRDL), NOHPPCZ, and leadership in antimicrobial resistance surveillance through KARSAP and KARS-Net. Community outreach is strengthened through the Family Adoption Program, health education activities and rural outreach OP services. These initiatives collectively reflect the institution's commitment to excellence in healthcare delivery, education, research, and community service.



Fig. 89. World Antimicrobial Resistance Awareness Week 2025

CHAPTER 7

ACADEMIC AND EDUCATION DEVELOPMENT PLANS

7.1 Introduction

Government Medical College, Trivandrum, founded in 1951, is a leading institution in medical education in India. Its academic development combines strong traditions with modern innovations, focusing on rigorous training, clinical exposure, interdisciplinary collaboration, and research addressing public health needs. With advanced infrastructure, experienced faculty, and a commitment to continuous improvement, the college exemplifies excellence in medical education while upholding social responsibility.

7.2 Undergraduate education

Government Medical College, Thiruvananthapuram, is a comprehensive academic centre, affiliated with Kerala University of Medical Sciences (KUHS), offering a full spectrum of medical education from undergraduate to super-speciality levels, supported by extensive clinical infrastructure. Along with medical course, the institute is training students in various paramedical and pharmacy degree and diploma courses

Annually 250 students are admitted for the MBBS course. MBBS teaching at Government Medical College, Thiruvananthapuram, follows the Competency-Based Medical Education (CBME) curriculum introduced by the National Medical Commission (NMC) in 2019. Thus, the undergraduate students are trained not only in knowledge but also in skills, communication, ethics, and professionalism right from the first year.

A one-month Foundation Course introduces students to medical ethics, communication, computer skills, and basic life support. Early Clinical Exposure (ECE) ensures patient interaction from the first year, linking basic sciences with clinical practice. Teaching is delivered in an integrated manner, both horizontally and vertically, to promote holistic understanding. Attitude, Ethics, and Communication (AETCOM) modules are embedded throughout the programme to foster professionalism. In addition, skill laboratories provide structured, hands-on training in essential clinical skills through simulation and supervised practice. As part of curriculum, family adoption is implemented from 2019 onwards; each

student is assigned with three families during the first year of the course and continued care and support is given till they complete their course

Table 38: Details of MBBS course

Phase	Duration	Focus Areas
Phase I (Pre-clinical)	12 months	Anatomy, Physiology, Biochemistry + Foundation Course + ECE + AETCOM
Phase II (Para-clinical)	12 months	Pathology, Pharmacology, Microbiology + Clinical postings + AETCOM
Phase III (Part 1)	28 months	Forensic medicine, Community medicine,
Phase III (Part 2)		Medicine, Surgery, Paediatrics, Obstetrics & Gynaecology, Ophthalmology, ENT

Table 39: Student Performance Metrics in MBBS

Year	Phase 1		Phase 2		Phase 3	
	Pass%	Distinction %	Pass%	Distinction %	Pass%	Distinction %
2022-23	86	12	81	8	78	10
2023-24	92	8	94	20	97	12
2024-25	92	15	90	16	97	15

*The pass percentage in the first attempt is recorded above. All students cleared the examinations in subsequent attempts, except for three students who, after four unsuccessful attempts, were declared *course-out* in accordance with NMC regulations.

The undergraduate MBBS students have consistently demonstrated excellence in academics and scholarly pursuits. Their achievements extend beyond routine examinations and reflect active engagement in competitive, research-orientated, and nationally recognised platforms.

7.2.1 Gold Medal Examinations

Students have distinguished themselves in subject-specific gold medal examinations conducted by universities and medical councils, underscoring their academic excellence and mastery of core medical disciplines. The college provides training and internal assessments and supports students' eligibility. At Government Medical College, Thiruvananthapuram, gold medal endowment awards are governed primarily by the Kerala University of Health Sciences (KUHS), which conducts the official university examinations and confers gold medals based on merit and ranks in MBBS and postgraduate courses. These medals are supported by endowment funds instituted by donors, alumni, or institutions, with awards given from the interest accrued. In addition, the college, its Parent-Teacher Association, and individual departments may administer internal or memorial endowment awards based on specified academic criteria, while overall authority and recognition for degree-level gold medals rests with KUHS.

These achievements highlight the students' commitment to academic rigour, research innovation, and professional development. Their active participation in competitive and scholarly activities enhances the reputation of the institution and prepares them for future contributions to the medical field.

7.2.2 Paramedical/Pharmacy Courses

Along with the MBBS course, the following courses in paramedical sciences are also conducted at this college, namely BCVT, BSc Optometry, BSc MLT, BSc Perfusion Technology, B Pharm, B Pharm (LE), and BSc Dialysis Technology. Annually 146 students are enrolled in these courses.

Table 40: Para-Medical/Pharmacy Degree Courses

Paramedical/Pharmacy Degree Courses		
So no	Courses Offered	Number of Seats
1	BCVT	5
2	BSc Optometry:	22
3	BSc MLT:	26
4	BSc Per Tech:	5
5	B Pharm:	66
6	B Pharm (LE):	6
7	BSc Dialysis Technology:	16
	TOTAL	146

7.2.3 Diploma Courses

Diploma courses are offering specialised skill-based training in high-demand areas of patient care and diagnostic services. This institute is offering diploma courses conducted by the Directorate of Medical Education. Annually 225 students are trained in various courses, the courses offered are Diploma in Radiodiagnosis and Radiotherapy Technology (DRRT), D. Pharm, Diploma in MLT, Diploma in Ophthalmic Assistant (DOA) course, Diploma in Dialysis Technology (DDT), Diploma in Operation Theatre and Anaesthesia Technology (DOTAT), Diploma in Endoscopy Technology (DET), Diploma in Dental Mechanic Course (DMC) and Diploma in Neuro Technology (DNT). A total of 225 seats under various diploma courses are available

Table 41. Diploma Courses in Govt medical college, Thiruvananthapuram

Diploma Courses		
Sl. no	Courses Offered	Number of Seats
1	Diploma in Radiodiagnosis and Radiotherapy Technology (DRRT): 11 in MCH + 30 in PIPMS	41
2	D. Pharm	37
3	Diploma in MLT (44 in MCH + 20 in PIPMS)	64
4	Diploma in Ophthalmic Assistant (DOA) course	25
5	Diploma in Dialysis Technology (DDT)	17
6	Diploma in Operation Theatre and Anaesthesia Technology (DOTAT)	17
7	Diploma in Endoscopy Technology (DET)	05
8	Diploma in Dental Mechanic Course (DMC)	10
9	Diploma in Neuro Technology (DNT)	09
	TOTAL	225

7.3 Postgraduate Education

7.3.1 Speciality- Postgraduate Medical Courses

GMCT offers a wide range of postgraduate degree (MD/MS) and diploma courses as a junior residency programme across 24 specialities, with a total of 248 seats in medical specialities. Postgraduate degree courses are conducted in MD Anatomy, MD Anaesthesiology, MD Biochemistry, MD Dermatology, MS ENT, MD Forensic Medicine, MD General Medicine, MS

General Surgery, MD Microbiology, MS O&G, MS Ophthalmology, MS Orthopaedics, MD Community Medicine, MD Paediatrics, MD Pathology, MD Pharmacology, MD Physiology, MD Physical Medicine & R, MD Psychiatry, MD Radiodiagnosis, MD Radiotherapy, MD Transfusion Medicine, Rehabilitation, MD Pulmonary Medicine, and MD Emergency Medicine. M Pharm in a paramedical discipline, MSc in Medical laboratory Technology.

Table 42: Broad specialty Courses Offered by Government Medical College

Sl. No	Courses Offered	Number of Seats
1	MD Anatomy	04
2	MD Anaesthesiology	12
3	MD Biochemistry	04
4	MD Dermatology	06
5	MS ENT	07
6	MD Forensic Medicine	04
7	MD General Medicine	24
8	MS General Surgery	24
9	MD Microbiology	04
10	MS O&G	30
11	MS Ophthalmology	12
12	MS Orthopaedics	18
13	MD Community Medicine	07
14	MD Paediatrics	24

15	MD Pathology	12
16	MD Pharmacology	06
17	MD Physiology	05
18	MD PMR	03
19	MD Psychiatry	12
20	MD Radio diagnosis	09
21	MD Radio Therapy	06
22	MD Transfusion Medicine	03
23	MD Pulmonary Medicine	09
24	MD Emergency Medicine	03
	TOTAL	248

7.3.2 Super Speciality-Medical Courses

The institution offers advanced medical training as senior residency program in 14 super-specialty disciplines (DM/MCh) with 58 seats, including DM Neurology, DM Gastroenterology, DM Nephrology, Mch Neurosurgery, MCh Paediatric Surgery, Mch Surgical Gastroenterology, Mch Plastic Surgery, Mch Cardiovascular & Thoracic Surgery, Mch Genito Urinary Surgery, Mch Reproductive Surgery & Medicine, DM Endocrinology, DM Paediatric Neurology, DM Neonatology,

Table 42. Super Speciality courses in GMC Thiruvananthapuram

Superspeciality Courses		
Sl No	Courses Offered	Number of Seats
1	DM Cardiology	8
2	DM Neurology	5
3	DM Gastroenterology	6
4	DM Nephrology	3
5	MCh Neurosurgery	6
6	MCh Paediatric Surgery:	6
7	MCh Surgical Gastroenterology:	2
8	MCh Plastic Surgery:	2
9	MCh Cardiovascular & Thoracic Surgery:	4
10	MCh Genito-Urinary Surgery:	6
11	MCh Reproductive Surgery & Medicine:	2
12	DM Endocrinology:	2
13	DM Paediatric Neurology:	2
14	DM Neonatology:	4
	TOTAL	58

Proposals for academic development

Super-speciality seats have been sanctioned in the disciplines of *Critical Care* and *Infectious Disease*. The institution is now planning to apply for sanction of seats in *DM Genetics*, further expanding the scope of advanced medical education and training.

7.3.3. Postgraduate Paramedical/Pharmacy Courses

Master's in pharmacy and medical laboratory courses are also offered in Govt Medical College, Thiruvananthapuram

Table 43: Speciality postgraduate paramedical courses

Paramedical/Pharmacy PG courses		
1	M Pharm (Master of Pharmacy)	42
2	MSc Medical Laboratory Technology (MLT)	12
	TOTAL	54

Conclusion

The institution has consistently maintained strong academic outcomes, with high pass percentages across MBBS batches and minimal attrition in line with NMC norms. The sanctioning of super-speciality seats in *Critical Care* and *Infectious Disease* marks a significant milestone in academic expansion. With plans underway to apply for *DM Genetics* sanction, the institution reaffirms its commitment to advancing medical education, fostering excellence in training, and addressing emerging healthcare needs

7.4 Research Projects and other Achievements

7.4.1 Research Projects

Several students have successfully secured prestigious Indian Council of Medical Research (ICMR) Short-Term Studentship (STS) funding, reflecting their aptitude for research methodology, data analysis, and contribution to advancing medical science.

Table 44: Research Proposals and Clinical Trials approved by Human Ethics Committee

Research Proposals and Clinical Trials approved by Human Ethics Committee		
Year	Govt. Medical College, Thiruvananthapuram	RIO, Thiruvananthapuram
2022	240	6
2023	416	15
2024	379	14
2025	523	27

ICMR & Institutional Projects: PG students are regularly involved in Indian Council of Medical Research (ICMR)-funded projects and institutional research initiatives.

7.4.2 other Achievements

Publications: Contributions to peer-reviewed journals, including case reports, original articles, and systematic reviews.

Conference Presentations: PG students present their research findings through oral and poster presentations at both national and international conferences. Their active participation reflects strong communication skills, scientific curiosity, and commitment to knowledge dissemination.

Prizes and Recognitions: Many students have secured awards and prizes for best papers, posters, and oral presentations, bringing distinction to the college and highlighting the quality of research conducted.

Inter-Collegiate Quiz Programs

Students have actively participated in and excelled at inter-collegiate medical quiz competitions, showcasing their depth of knowledge, critical thinking, and collaborative skills.

National-Level Poster Competitions

Students have presented innovative ideas and research findings in poster competitions at the national level, earning recognition for their scientific communication and creativity.

7.4.3 Postgraduate Academic Achievements

Academic Excellence

- **Advanced Training Programs:** PG students undergo rigorous training across multiple specialities, contributing to Kerala University of Health Sciences' academic standards.
- **Examinations & Distinctions:** Many students secure top ranks and distinctions in university examinations, reflecting strong academic performance.
- **Teaching Roles:** PGs actively participate in undergraduate teaching, bedside clinics and journal clubs, strengthening the academic ecosystem.

7.4.4 Clinical & Community Engagement

Clinical Research: PGs contribute to ongoing clinical trials and evidence-based practice in tertiary care settings. The number of clinical trials and research proposals approved in the last 3 years, from 2023 to 2025 are 416, 379,573 respectively.

Community-Orientated Studies: Involvement in epidemiological surveys, public health projects, and outreach programmes that align with Kerala's healthcare priorities.

7.5 Institutional Impact

These achievements enhance GMCT's reputation as Kerala's oldest and most prestigious medical college, founded in 1951.

Table 45: Medical PG Placement & Higher studies for previous 3 years

Academic year	PG students intake in the year	No. PGs graduating in minimum stipulated time	No. of PG students placed	Median salary of the placed postgraduates	No. of PG students selected for higher studies
2018-19	218	215	197	1600000	18
2019-20	218	210	189	1650000	21
2020-21	245	227	191	1730000	36

PG students' research output and academic excellence strengthen the institution's standing in NIRF rankings and contribute to national medical knowledge.

Their involvement in teaching, research, and clinical care ensures a holistic postgraduate training environment that prepares them for leadership roles in medicine.

7.6 Future Development Plans

To further strengthen postgraduate academic and research output, Government Medical College, Thiruvananthapuram envisions:

- **Enhanced Research Infrastructure:** Establishment of advanced laboratories, biostatistics support units, and digital research platforms.
- **Expanded Collaborations:** Greater partnerships with national and international universities, research institutes, and funding agencies.
- **Capacity Building:** Regular workshops on research methodology, scientific writing, and advanced clinical skills to empower PG students.

- **Innovation & Translational Research:** Encouraging projects that bridge laboratory findings with clinical applications, fostering innovation in patient care.
- **Global Exposure:** Facilitating participation in international exchange programs, conferences, and collaborative studies to broaden academic horizons.

7.7 Summary

In conclusion, the institution demonstrates strong academic foundations through consistent examination performance, a committed faculty, and a culture that encourages merit, research, and professional excellence. Building on these strengths, future development plans focus on enhancing research output, integrating advanced teaching-learning technologies, expanding interdisciplinary collaboration, and strengthening student support systems to ensure sustained academic excellence and global relevance.

CHAPTER 8

HOSPITAL DEVELOPMENT SOCIETY (HDS)

8.1 Introduction

The Hospital Development Society (HDS) is a vital, semi-autonomous body enhancing public health care quality, infrastructure, and efficiency. It serves as a model for decentralized governance, bridging resource gaps with community and government support. The governance of the HDS is guided by administrative expertise with medical, thereby ensuring effective changes in patient care, infrastructure and overall efficiency. HDS focuses on community involvement, resource mobilization, and service improvement through a structured committee with members from health officials, local government, NGOs, and eminent citizens, aiming to enhance hospital functioning, cleanliness, and resource allocation. HDS has constant vigil on hospital functioning, identify defects, and suggest improvements. Through HDS local resources both financial and voluntary are mobilized for better amenities and maintenance

8.2 HDS Structure:

MCH and SAT hospitals have similar structures as mentioned below,

- Hospital Development Society was constituted with the Hon'ble District Collector as Chairman
- Govt. Medical College Principal as Vice Chairman
- Medical Superintendent as Secretary
- Lay Secretary as Treasurer
- Office Superintendent, Executive Committee, General Body and representatives of Legislative Assembly members and recognized political parties.

8.3 Role and Mandate

The HDS is established to enhance the efficiency, quality, and responsiveness of public healthcare institutions through decentralized governance, financial autonomy, and community participation. It functions as a supportive body that complements the

administrative framework of government hospitals while ensuring accountability and transparency in operations.

The core mandate of the HDS revolves around resource mobilization and financial oversight, leveraging its capabilities to mobilize funds that supplement government allocations and address critical funding gaps.

8.4 HDS in SAT Hospital

The HDS Committee functions at SAT Hospital, Thiruvananthapuram, assisting with hospital management, infrastructure development, and staff welfare.

- Hospital Development Society was constituted with the Hon'ble District Collector as Chairman
- Govt. Medical College Principal as Vice Chairman
- Medical Superintendent as Member Secretary and convener
- Lay Secretary as Treasurer
- Office Superintendent, Executive Committee, General Body and representatives of Legislative Assembly members and recognized political parties.

Main Activities

- Running of **two** HDS pharmacies
- Running of **one** Lab

Appointment of staff on daily wages for smooth hospital functioning

A total of 129 temporary employees have been appointed under HDS across various categories. Additionally, HDS outsources a canteen, one cafeteria, and a stationery sales counter.

8.5 HDS Fund Utilization

HDS effectively channels funds into critical areas, yielding tangible improvements:

Infrastructure and Sanitation: Upgrades facilities, fostering a safe and hygienic environment.

Procurement: Swiftly acquires critical medical equipment, addressing urgent needs beyond standard budget cycles.

This targeted approach not only elevates patient care but also optimizes hospital operations. Its role in strengthening healthcare infrastructure is pivotal, contributing to improved health outcomes and more efficient service delivery.

8.6 Accountability and engagement

The HDS maintains high standards of financial transparency through robust accounting and periodic reporting, ensuring compliance with state regulations and sustaining the confidence of authorities and donors. This enables direct contributions to patient welfare and institutional development.

8.7 Operational Management and Service Delivery

Society is responsible for the operation and maintenance of essential clinical support services and non- clinical patient amenities. It ensures the sustained functionality of core diagnostics services like Radiodiagnosis and Laboratory services, managing security and essential utilities.

Patient amenities such as the canteen, coffee shops, and comfort stations; and implementing welfare schemes for economically vulnerable patients.

8.8 Strategic Impact and flexibility

Beyond routine operations, the HDS contributes to institutional capacity through staff training and community outreach. The flexible financial framework of the HDS enables prompt mobilization of resources during public health emergencies and disaster situations.

8.9 Income for HDS Activities and Employee Salaries:

- Sales of medicines at HDS pharmacies
- HDS lab charges and fees
- Rent from canteen, cafeteria, and stationery counter
- User fee collections HDS.

Table 46: Income and Expenditure statement of Hospital Development Society

Year	Income	Expenditure
2022-23	6,51,61,074	4,80,83,513
2023-24	7,09,23,126	9,47,01,801
2024-25	7,38,17,706	8,38,79,244

8.10 HDS Support Infrastructure

HDS conducts repair and maintenance of various machines working in different departments and also meets funds for purchase of spares and CAMC of these machines. HDS has initiated the purchase of an MRI machine for 8 crores, ESWL machine for 2.5 crores and Gastroenterology Ultrasound machine for 25 lakhs. Moreover, HDS spends approximately 3 crores for CAMC, 4 crores for CT/MRI films, 4 crores for Cath labs and 8 crores for reagents for lab machines installed in HDS lab working under Hospital Development Society. Almost all lab tests are done through the HDS lab at a reasonable rate. Additionally in the event of government funds being inadequate, HDS pays the bills of oxygen and IMAGE Biomedical waste management. HDS pays for the salary for all the staff appointed by it for the purpose of the hospital without any funds from outside. HDS collects user fees from the APL patients while giving free treatment (all tests including MRI, CT, X-ray, lab tests etc.) of the BPL patients, no bystander, unknown, prison, ART, Government Orphanage patients etc. Accurate day-to-day amounts is kept and maintained in the office and is audited by internal audit and Chartered Accountant and also open to AG audit and Local fund audit as and when required Community Pharmacy working under Hospital Development Society, provides medicines and surgical items at reasonable rate for economically poor patients and for patients under various schemes.

HDS serves as an effective institutional model for strengthening local governance, operational efficiency and timely responsiveness.

CHAPTER 9

INNOVATIVE PROGRAMMES & CENTRES OF EXCELLENCE

Government Medical College, Thiruvananthapuram demonstrates its role as a leader in clinical innovation, research, emergency care, and technology integration through a number of innovative programmes and initiatives.

9.1 Centres of Excellence

1. **National Institutional Ranking:** Government Medical College, Thiruvananthapuram Ranked 42nd in the National Institutional Ranking Framework (NIRF) under Ministry of Education in 2024 and sixth among the Govt Medical colleges in the country
2. **Centre of Excellence for Trauma Care and Burns Treatment :** GMC, TVM's Emergency Medicine department has been selected as a Centre Of Excellence by the Central Government, supported by NITI Aayog and ICMR. The department has introduced Scientific triage, a chest pain clinic, stroke hotline services and enhanced patient centric emergency facilities. New fellowship programmes, 100 ICU beds and SPECT scan facilities have been established.
3. **Centre of Excellence (CoE) for Rare Disease:** In January 2023, SAT Hospital was notified as a Centre of Excellence (CoE) for Rare Disease Treatment under India's National Policy for Rare Diseases (NPRD), recognized by the Union Health Ministry for diagnosis, treatment, and research, enabling specialized care and genetic testing, with administrative support for patient counseling and management. This status aims to revolutionize rare disease detection and care in Kerala

9.2 Innovative Programmes

1. **KARSAP** (Kerala Antimicrobial Resistance Strategic Action Plan) – State Nodal Centre is functioning in the department of Microbiology involving multiple sectors and it addresses a wide range of activities required to tackle Anti Microbial Resistance problem effectively. Head of the Microbiology Department serves as the Nodal Officer for KARSAP, as part of Kerala's Anti Microbial Resistance surveillance system, state-wide antibiotic resistance patterns (antibiogram) is prepared and disseminated

throughout the state. One health approach Integrates human, animal, and environmental health sectors is adopted. This State Government program aim to make the state antibiotic-literate and serve as a model for other states in India

2. **Nodal Drug Resistant TB Centre (NDR-TBC):** This nodal centre is located at Institute of Chest Disease Pulayanarkotta, under the Respiratory Medicine Department of Government Medical College, Thiruvananthapuram. This centre is equipped to manage complicated cases of drug-resistant TB. The centre periodically reviews the implementation of the program for control of drug-resistant TB and acts as the referral centre and provides both outpatient and inpatient treatment facilities for drug resistant TB.
3. **MBFHI Certification:** The Mother and Baby Friendly Hospital Initiative (MBFHI) program in Kerala is a state-level initiative by the National Health Mission (NHM) in collaboration with the Indian Academy of Paediatrics, National Neonatology forum (NNF) Kerala, UNICEF, and the Kerala University of Health Sciences (KUHS) to promote and support breastfeeding and optimal maternal and newborn care practices. Sree Avittam Thirunal Hospital received MBFHI certification in 2022 for being a Mother and Baby Friendly Hospital.
4. **Nodal Centre for Addiction Treatment Facility (ATF):** The Ministry of Social Justice and Empowerment had selected the Department of Psychiatry Government Medical College, Thiruvananthapuram as a Nodal centre for Addiction Treatment Facility (ATF).
5. **LaQshya Certification:** In March 2024, the SAT hospital received national quality certification under the Union Health Ministry's 'LaQshya' initiative for the high quality of care and improved infrastructure in its labour rooms and maternity The SAT hospital secured high scores (97.5% for labor rooms, 98.5% for maternity Operation Theaters)
6. **State Nodal Centre for Rare Blood group Registry:** The blood bank in this institute has been designated as the state nodal center for the Rare Blood Donor Registry by the Kerala State Blood Transfusion Council and is functioning in the transfusion

medicine department since 2022 with the purpose of registering donors with rare blood groups, so that patients needing rare blood groups are connected with donors in medical emergencies.

7. **ADR Monitoring Centre:** Thiruvananthapuram Medical College is a designated centre for monitoring adverse drug reactions under India's Pharmacovigilance Programme (PvPI). The Department of pharmacology collects and analyses reports of drug side effects and submits to the National Coordination Center (NCC) for PvPI thereby contributing to understanding drug patterns, enhancing medicine safety, and improving patient health outcomes. The ADR monitoring committee is playing a vital role in India's national effort to monitor drug safety and ensure medicines are used effectively and safely.
8. **Regional Reference Laboratory for HIV Sentinel Surveillance:** For sentinel surveillance of HIV, Regional reference laboratory is established in the Department of Microbiology, coordinated by the ICMR-National Institute of Epidemiology (NIE) in Chennai, in collaboration with the Kerala State AIDS Control Society (KSACS). Medical College Thiruvananthapuram serves as a key sentinel site, contributing to understanding HIV burden.
9. **Skin Bank:** The State First Skin Bank and Processing Facility has set up in Government Medical College, Thiruvananthapuram, a major innovation in trauma and burn care. The facility was sanctioned in 2024 and became operational in late 2025, with processing started in December 2025. Facilities established for Collection, processing, and storage of donated human skin with a capital investment of, costs 6.75 crore, to enhance s burn treatment capabilities in the state
10. **Advanced Cardiac Procedures - Leadless Pacemaker Implantation:**The cardiology department successfully performed the Micra AV leadless pacemaker implantation, a minimally invasive, state - of - the - art procedure, marking a significant achievement in public healthcare for managing heart rhythm disorders. This became Kerala's first leadless pacemaker implantation in government sector

11. **Comprehensive Stroke Center with Advanced Neuro Intervention Facility:** The department of Neurology operates a comprehensive stroke center with advanced Neuro Intervention facility, offering minimally invasive treatments for brain/neck vessel disorders via a dedicated Neuro Cath Lab, CT angiogram and Stroke ICU. Thus, the Medical College Thiruvananthapuram became the first hospital in government sector to establish Neuro Cath Lab for advanced stroke, focusing on timely, accessible, and comprehensive management of neurovascular conditions
12. **NABL Accreditation:** CD4 testing lab under National AIDS Control Organization (NACO) and HIV testing laboratory functioning in department of Microbiology are NABL accredited.
13. **National One Health Program Surveillance Centre:** Medical College Thiruvananthapuram is functioning as a sentinel site for surveillance of zoonotic diseases functioning through the Departments of Community Medicine and Microbiology
14. **Innovation and Entrepreneurship Development Centres (IEDCs):** A Government of Kerala initiative to foster healthcare innovation, with a focus on health tech and med tech innovation ecosystem aiming to transform clinical challenges into indigenous solutions. It serves as a launchpad for students and clinicians to develop prototypes, receive mentorship, and connect with industry, bridging medicine and technology to create cost-effective, locally designed healthcare products for the Indian market. This program is supported by Kerala Start Up Mission (KSUM).
15. **Innovation Cell:** Our institute is actively cultivating a robust culture of healthcare innovation, engaging members from the student level to senior faculty. We have a vibrant, student-led Innovation Club that successfully competes in state-level ideation programs, alongside faculty-driven initiatives focused on departmental process improvement, such as leveraging data science to optimize clinical workflows. Our strategy emphasizes strong external collaboration, particularly with the Kerala Startup Mission (KSUM) ecosystem and various engineering colleges, to bridge the gap between clinical needs and technical solutions. Internally, we foster cross-

functional teams that bring together clinical, public health, and technical experts to identify and address pressing healthcare challenges. This multi-pronged approach is systematically building a pipeline of practical, needs-driven healthcare solutions originating directly from within the medical community.

16. **Digital Health Initiatives:** Telemedicine-Utilizes the national e Sanjeevani platform for free, accessible teleconsultations with specialist doctors thereby providing quality care to underserved populations.
17. **Academic Initiative:** An Education 3D software developed by the department of Anatomy in collaboration Sree Chithra Tirunal Institute of Medical Science and Technology (SCTIMST) in the year 2024
18. **ART centre:** provides care for people living with HIV. Provides comprehensive care, support, and medication (ARVs) for people living with HIV/AIDS (PLHIV). In addition to service delivery, the centre contributes to surveillance and reporting, trains healthcare workers, and implements updated national HIV treatment guidelines within the medical college and its referral network.
19. **ART Plus centres** are linked to ART centers to provide a higher level of care, including assessment and initiation of second-line ART to eligible patients
20. **Spinal Muscular Atrophy (SMA) Clinic:** Conducted in SAT hospital through the department of Paediatrics. Multidisciplinary care for SMA patients, including Paediatric neurology, orthopedics (spine surgery for scoliosis), and medical genetics provided under the Kerala Against Rare Diseases (KARe) program.
21. **Cochlear Implantation program:** Conducted by the ENT department in collaboration with Social Security Mission providing free surgery and auditory verbal therapy (AVT) for eligible children under 5years belonging to poor families. This program is named as "**Sruthi Tharangam**", the Kerala Government's free cochlear implantation project for children, aiming to restore hearing for those with severe to profound sensorineural hearing loss.
22. **Registered Assisted Reproductive Technology (ART) bank:** The Department of Reproductive Medicine and surgery Registered under the Assisted Reproductive

- Technology (Regulation) Act, 2021 as a Level II clinic (2023) and having a registered ART bank from the year 2024.
23. **Semen Cryo- preservation facility:** for cancer patients established and functioning in the Department of Reproductive Medicine and surgery with more than 200 cryo-preserved samples.
 24. **IVF-ICSI:** The Reproductive Medicine and Assisted Reproductive Technology unit was established in SAT hospital and became fully operational in 2012 became the first hospital in the public sector in South India and third in India to have such a facility. The number of babies born following IVF-ICSI touched 500 numbers in 2025
 25. **Approval for Post Graduate Course:** The National Medical Commission has granted approval for MD in Emergency Medicine and DM pulmonology in Respiratory Medicine in Thiruvananthapuram Government Medical College is the first among Kerala Government Medical Colleges to commence these courses. MCh in Reproductive Medicine and Surgery started in 2019 and became the first Government Medical College in India to start this course other than AIIMS, New Delhi
 26. **Extracorporeal Membrane Oxygenation (ECMO) services:** Department of paediatric cardiology has an ECMO machine providing critical life support for heart and lung failure, with specialized teams and advanced equipment
 27. **Recognition: J.R. Jolly National Award – ISBTI-** Dr. Shaiji P.S., Assistant Professor, Department of Transfusion Medicine, Government Medical College, Thiruvananthapuram, was conferred the prestigious J.R. Jolly Award by the Indian Society of Blood Transfusion and Immunohaematology (ISBTI) at Transcon 2020 for outstanding contributions to research, teaching, and training in transfusion medicine
 28. **Recognition:** The Kerala University of Health Sciences has honoured Mr. Pradeep Kumar, Assistant Professor in the M.L.T. Department of the Medical College, with the '**Best Teacher Award**' (Allied Science category)
 29. The 47th Annual conference of All Kerala Congress of Obstetrics & Gynaecology - (AKCOG) 2025 at Thiruvananthapuram in association with TROGS.

- 30. International Nephrology Partnerships:** The Department of Paediatric Nephrology forged an International Society of Nephrology (ISN) Sister Renal Centre partnership in 2018 with Cincinnati Children's Hospital Medical Center (CCHMC), Ohio, USA—one of the world's premier paediatric nephrology centres. Initially at ISN Level B, this collaboration enhanced comprehensive renal care services, including dialysis, transplantation support, and chronic kidney disease management for children. Upgraded to ISN Level A and graduated successfully in 2024, the program now leads a trio mentorship with CCHMC as global mentor and Assam Government Medical College as emerging partner.
- 31. National Paediatric Nephrology Conclave:** department of paediatric nephrology in collaboration with Cincinnati Children's Hospital Medical Centre, Ohio, USA conducted this two-day program.

CHAPTER 10**FINANCIAL ALLOCATION AND UTILIZATION****Table 47: Budget allocation and utilization of various schemes 2015-2016**

Sl. No.	Scheme	Budget Provision	Final Expenditure as on 31.03.2016	Balance to be surrendered
1	PMSSY	100000000	75510601	24489399
2	ME	13647000	13645241	1759
3	MS	13000000	12997787	2213
4	OC	23177000	21517138	1659862
5	Heart Foundation	10000000	10000000	0
6	Emergency Critical Care	5000000	0	5000000
7	MDRL	121700000	20000000	101700000
8	Waste Management	3000000	2999716	284
9	PIED	600000	599798	202
10	SBMR	5000000	5000000	0
11	Dialysis Unit	2000000	2000000	0
12	CPS	6000000	5973016	26984
13	DDMOTP	5000000	5000000	0

14	Quality Assessment	800000	769723	30277
15	Biomedical Wing	6000000	830482	5169518
16	Burns Unit	9250000	3873504	5376496
17	Faculty Improvement	2500000	2488519	11481
18	Liver Transplantation	5000000	5000000	0
19	Reproductive Medicine	2900000	756573	2143427
20	Poly Trauma	113185000	25867308	87317692
21	Oncology	62750000	62750000	0

Table 48: Budget allocation and utilization of various schemes 2016-2017

Sl. No.	Scheme	Budget Provision/ Received Amount	Final Expenditure as On 31.03.2017	Balance to be surrendered
1	MW	2,50,00,000	2,49,99,395	605
2	ME	3,35,00,000	2,64,66,420	70,33,580
3	MS	2,90,00,000	2,45,98,467	44,01,533
4	OC	21,10,57,928	20,09,96,518	1,00,61,410
5	CPS	5,00,000	2,24,815	2,75,185

6	CPS	5,00,000	0	5,00,000
7	CPS	50,00,000	45,81,205	4,18,795
8	SBMR	40,00,000	40,00,000	2,43,269
9	Waste Treatment Facilities in Medical Colleges	60,00,000	57,56,731	2,43,269
10	Standardisation of Facilities in Maternal & Child Health	7,26,43,307	9,12,07,505	1,14,35,802
11	SPEID Cell	8,00,000	7,88,763	11,237
12	Dialysis Unit	20,00,000	19,99,992	8
13	DDMOTP	1,00,00,000	1,00,00,000	0
14	Quality Assessment of Drugs	30,00,000	16,71,927	13,28,073
15	Faculty Improvement	30,00,000	29,93,535	6,465
16	Biomedical Wing	15,00,000	14,99,842	158

Table 49: Budget allocation and utilization of various schemes 2017-2018

Sl. No.	Scheme	Allotment Received (Including SDG/Addl. Auth/ Reappropriation)	Final Expenditure as on 31.03.2018	Balance to be surrendered
1	MW	7,99,56,295	7,98,48,295	1,08,000
2	ME	80000000	79382669	6,17,331
3	MS	63000000	44540501	1,84,59,499
4	OC	242000000	239678426	23,21,574
5	CPS	300000	281040	18,960
6	CPS	800000	795106	4,894
7	CPS	900000	872384	27,616
8	SBMR	2163000	2160746	2,254
9	Waste Treatment Facilities in Medical Colleges	5000000	4923466	76,534
10	Standardisation of Facilities in	23000000	22681062	3,18,938

	Maternal & Child Health			
11	SPEID Cell	900000	899317	683
12	Dialysis Unit	4000000	4000000	0
13	Quality Assessment of Drugs	3000000	300000	27,00,000
14	Faculty Improvement	6000000	3760362	22,39,638
15	Biomedical Wing	2000000	1544812	4,55,188
16	MDRL	70000000	3877299 4	3,12,27,00 6
17	Establishment & Modernization of Drug	28050000	2805000 0	0
18	Revamping of existing infrastructure and High end Equipments	55000000	5428885 6	7,11,144
19	Creation of patient friendly hospital environment	20000000	2000000 0	0

20	Strengthening of Paramedical Education	7500000	6105423	13,94,577
21	MRU - State Share	8330000	8330000	0
22	Oncology & Tertiary Care in all Medical Colleges	86018113	0	8,60,18,113

Table 50: Budget allocation and utilization of various schemes 2018-2019

Sl. No.	Scheme	Budget Provision (Including SDG/Addl. Auth/ Reappropriation)	Final Expenditure as on 31.03.2019	Balance to be surrendered
1	Minor Works	6,00,80,000	6,00,79,400	600
2	Machinery & Equipments	60000000	20688844	3,93,11,156
3	Materials & Supplies	40000000	39999400	600
4	Other Charges	120000000	77660392	4,23,39,608
5	College of Pharmaceutical Sciences	300000	292274	7,726

6	College of Pharmaceutical Sciences	500000	432363	67,637
7	College of Pharmaceutical Sciences	700000	697957	2,043
8	SBMR	1000000	588245	4,11,755
9	Waste Treatment Facilities in Medical Colleges	5500000	5354295	1,45,705
10	Standardisation of Facilities in Maternal & Child Health	4930000	2753649	21,76,351
11	SPEID Cell	1100000	1099868	132
12	DDMOTP	6000000	3202627	27,97,373
13	Faculty Improvement	5000000	3758413	12,41,587
14	Biomedical Wing	1900000	1152140	7,47,860
15	Revamping of existing infrastructure and High end Equipments	55000000	54880637	1,19,363
16	Oncology & Tertiary Care Centre	40000000	0	4,00,00,000

17	Strengthening of Paramedical Education	1000000	999909	91
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Table 51: Budget allocation and utilization of various schemes 2019-2020

Sl. No.	Scheme	Budget Provision (Including SDG/Addl. Auth/ Reappropriation)	Allotment Received	Final Expenditure	Balance amount to be surrendered
1	Minor Works	8,00,00,000	7,99,89,600	7,93,22,000	6,67,600
2	Machinery & Equipments	60000000	60000000	45948515	1,40,51,485
3	Materials & Supplies	45000000	45000000	37932812	70,67,188
4	Other Charges	145000000	145000000	104812506	4,01,87,494
5	College of Pharmaceuti cal Sciences	1500000	1500000	385258	11,14,742
6	College of Pharmaceuti cal Sciences	700000	700000	432478	2,67,522

7	College of Pharmaceuti cal Sciences	2000000	2000000	1002031	9,97,969
8	SBMR	5000000	1500000	554215	9,45,785
9	Waste Treatment Facilities in Medical Colleges	12500000	12500000	1373555	1,11,26,44 5
10	Standardisa tion of Facilities in Maternal & Child Health	60000000	59972000	2709390	5,72,62,61 0
11	SPEID Cell	2500000	2500000	877684	16,22,316
12	DDMOTP	7000000	7000000	4322396	26,77,604
13	Faculty Improvemen t	5000000	5000000	1063899	39,36,101
14	Biomedical Wing	2000000	2000000	720808	12,79,192
15	Revamping of existing infrastructur e and High	55000000	55000000	50465152	45,34,848

	end Equipments				
16	Comprehensive Stroke Centre	50000000	49620000	0	4,96,20,000
17	NPPMBI (State support to 50% CSS under DME)	40000000	34650000	34650000	0

Table 52: Budget allocation and utilization of various schemes 2020-2021

No.	Scheme	Allotment Received	Total Expenditure	Balance Amount Surrendered
1	MCT Minor Works	5,99,89,900	5,99,89,000	0
2	MCT M&E	6,00,00,000	5,30,64,745	69,35,255
3	MCT M&S	4,50,00,000	4,37,83,970	12,16,030
4	MCT OC	13,50,00,000	12,79,06,084	70,93,916
5	CPS M&E	5,00,000	4,11,820.00	88,180
6	CPS M&S	5,00,000	2,99,140	2,00,860
7	CPS OC	5,00,000	4,89,381	10,619
8	SBMR	30,00,000	15,73,618	14,26,382

9	Waste Treatment Facilities	2,00,00,000	1,67,77,535	32,22,465
10	Mother & Child Block	1,00,00,000	94,36,650	5,63,350
11	SPEID Cell	28,50,000	10,26,136	18,23,864
12	DDMOTP	50,00,000	40,44,650	9,55,350
13	Faculty Improvement Programme	13,45,000	7,88,908	5,56,092
14	Providing Imaging Facilities including Interventional Radiology in Medical Colleges	2,70,00,000	2,70,00,000	0
15	Strengthening of Para Medical Education	15,00,000	14,78,214	21,786
16	Oncology & Tertiary Care	3,50,00,000	3,50,00,000	0
17	Revamping of existing infrastructure and Maintenance of High end equipment in MC	3,11,93,500	3,11,93,500	0
		2,68,06,500	2,60,37,043	7,69,457

18	Starting Biomedical Wing in Medical Colleges	10,00,000	2,83,640	7,16,360
		25,00,000	20,84,385	4,15,615
		5,00,000	1,97,363	3,02,637
19	Comprehensive Stroke Centre procurement of Radiological Vascular Angiography System	5,15,75,571	5,14,83,816	91,755
20	MCHT Land acquisition and buildings	11,70,20,000	11,70,20,000	0

Table 53: Budget allocation and utilization of various schemes 2022-23

Sl. No.	Scheme	Budget Provision (including SDG/Additional Authorisation/ Re Appropriation)	Final Expenditure as on 31.03.2023	Balance amount to be surrendered
1	MCT Minor Works	5,00,00,000	5,00,00,000	0
2	MCT M&E	7,00,00,000	3,34,46,838	3,65,53,162
3	MCT M&S	6,00,00,000	3,89,52,594	2,10,47,406

4	MCT OC	16,00,00,000	12,34,08,003	3,65,91,997
5	CPS M&E	3,51,000	34,170	3,16,830
6	CPS M&S	1,75,000	49,556	1,25,444
7	CPS OC	94,74,000	67,19,974	27,54,026
8	SBMR	25,00,000	2,96,469	22,03,531
9	Waste Treatment Facilities	1,90,00,000	81,11,959	1,08,88,041
10	Mother & Child Block	1,00,00,000	89,38,037	10,61,963
11	SPEID Cell	25,00,000	15,87,087	9,12,913
12	DDMOTP	55,00,000	39,48,792	15,51,208
13	Faculty Improvement Programme	12,00,000	2,51,829	9,48,171
14	Strengthening of Para Medical Education	12,00,000	6,27,031	5,72,969
15	Revamping of existing infrastructure and Maintenance of High end equipment in MC	1,00,00,000	1,00,00,000	0
		1,00,00,000	1,00,00,000	0
		3,00,00,000	2,32,88,730	67,11,270

16	Ensuring Blood Safety in MC	19,90,000	18,89,691	1,00,309
17	Critical Care Units in Medical Colleges	94,22,500	71,29,313	22,93,187
18	Imaging Facilities in MC	1,02,69,000	1,02,69,000	0
19	Comprehensive Stroke Centre in MC	3,87,00,000	2,70,74,531	1,16,25,469

CHAPTER 11

RESEARCH INITIATIVES & ACHIEVEMENTS

Government Medical College Thiruvananthapuram (GMCT) leads in medical research within Kerala, focusing on multidisciplinary initiatives that advance healthcare outcomes. Key facilities like the Multidisciplinary Research Laboratory (MDRL) support viral diagnostics, physiology studies, and innovative zebra fish research, contributing to state-level health advancements. This report outlines major research initiatives, collaborations, funded studies, and publications for submission to the Kerala government, with placeholders for exact numbers.

11.1 Research Collaborations

11.1.1 Research Projects and Funding

GMCT hosts the MDRL, featuring an ICMR Multidisciplinary Research Unit (MRU), Viral Research and Diagnostic Lab (VRDL), fostering students especially post graduates and faculty research. The Regional Institute of Ophthalmology advances eye care research, while the Child Development Centre conducts paediatric studies under state oversight. ICMR and SBMR are the major funding sources for most of the research studies in this institution. Several faculties are utilising this fund facility for doing research work in various specialities. Several clinical trials, which are part of multicentric studies, are also performing in this institution. All the research projects as well as trials are continuously monitored and supported by the Institutional Human Ethics Committee in a well-disciplined manner.

Table 54: Research Proposals and Clinical Trials approved by Institutional Human Ethics Committee

Research Proposals and Clinical Trials approved by Institutional Human Ethics Committee		
Year	Govt. Medical College, Thiruvananthapuram	RIO, Thiruvananthapuram
2022	240	6
2023	416	15
2024	379	14
2025	523	27

From financial year 2020 onwards, till now there are about 28 ICMR studies sanctioned in Government Medical College, Thiruvananthapuram. Few of them have finished and the rest are going in full swing. Other than funded studies, there are too many research studies, clinical trials and PhD studies happening in this institution. The numbers of the approved studies are mentioned below. There are about 31 approved clinical trials in this prestigious institution since 2020.

11.1.2 Multi-Disciplinary Research Unit (MRU)

In 2013, the Department of Health Research (DHR), Ministry of Health and Family Welfare, Government of India, sanctioned the Multidisciplinary Research Unit (MRU) at Government Medical College Thiruvananthapuram. Since then, it has actively participated in different research activities, as well as giving assistance and training to the faculty and staff of the Govt. Medical College, Thiruvananthapuram. The facility was established in 2015, and the MRU lab shifted to a new research laboratory within the MDRL building in November 2018. The facility currently has almost all sophisticated equipment and the laboratory can undertake molecular research in advanced and most modern areas of basic science and clinical research. The findings from different research projects of MRU were published in reputed journals or presented at various national and international conferences.

The Local Research Advisory Committee (LRAC) of MRU has selected 19 research proposals from medical college faculty members and completed 12 projects. Seven projects are currently ongoing. Eight extramural projects and 29 PG/MD students were used in this facility for thesis work. MRU organized 17 training programs for human research development, in which 147 staff members/students participated. In 2020, MRU established a state-of-the-art Zebrafish Research Facility for undertaking studies using zebrafish as a model organism; this facility is the first of its kind in Kerala. In 2024, also set up a "Cytogenetic Research Facility" to focus on rare genetic diseases. The establishment of a Central Instrumentation Facility for Animal Research is now underway at MRU.

Research output-outcome (since inception)

1. No. of projects initiated : 40
2. No. of projects completed : 22
3. No. of multi-centric projects : 12
4. No. of clinical trials undertaken : 01
5. No. of projects with extramural funding (national and international): 20
6. No. of Publications in indexed Journals :08
7. No. of projects that led to clinical practices/policy changes : 1
8. No. of guidelines/diagnostics process developed :04
9. No. of new diagnostics/devices validated : 01
10. Any other accomplishments : Zebrafish facility, Cytogenetics facility, Central Instrumentation Facility for Animal Research (CIFA)

11.2 Publications

Faculty contributions cover iron-deficiency anemia, blood neoplasms, and infectious diseases, influencing Kerala's public health policy. Studies from GMCT appear in ICMR reports and journals like The Lancet on metabolic NCDs, with local research on medication adherence for cardiovascular diseases. Achievements include NIRF ranking 42nd in 2024 and leadership in Kerala's health model, studied globally. Majority of the faculties of this

institution are continuously involved in various studies and researches. The detailed list of ongoing research works of each department are elaborated in the. Most of the faculties in this prestigious institution had published many research papers in various journals, some of them are high impact papers. Publication of research work done by faculties with the financial support from State Board of Medical Research (SBMR) as follows

Table 55 Articles Published by the faculties of Thiruvananthapuram Medical College from SBMR Projects

Table. Articles Published by the faculties of Thiruvananthapuram Medical College from SBMR Projects by Year	
Year	No of Articles
2014	3
2015	3
2016	2
2017	1
2018	9
2019	10
2020	6
2021	10
2022	5
2023	5
2024	1
TOTAL	55

*List of ongoing Research work by Faculties of Government Medical College is attached as **Annexures 3**

CHAPTER 12

SKILL DEVELOPMENT, SIMULATION LEARNING & CAPACITY BUILDING

12.1 Skill Development through Medical Education Unit

- **BCME (Basic Course in Medical Education)** The Basic Course in Medical Education (BCME) is a mandatory National Medical Commission (NMC) training for medical college faculty, focusing on Competency-Based Medical Education (CBME). Within the last 5 years almost all faculties in Govt Medical College are trained in revised basic courses in Medical Education in accordance with National Medical Commission (NMC) guidelines. The programs are organized and conducted through the Medical Education Unit. Training was conducted in batches. Each batch consists of 30 faculties. The application for permission with a list of 30 participants will be sent to Nodal Center, Government Medical College, Kottayam. They will process the application and send it to NMC. NMC will give the permission and date for the training. They will also send an observer to monitor the program and send a report to NMC.
- **Research Methodology training and workshops** annually conducted independently by the department of community medicine and paediatrics for post graduate students conducted as a two-day training workshop to provide essential skills for bridging theory with practical application in health research. Post graduate students of Paediatrics department are trained by the concerned department and PGs of all other departments were trained by the department of Community Medicine. Undergraduate students were also trained in research methodology. They were assigned to carry out research projects to start work in the fourth or fifth semester and complete in the seventh semester.
- **The Kerala Emergency Medicine Summit (KEMS) 2023** was a three-day international summit held from 17–19 March 2023 at Thiruvananthapuram, Kerala, organised by the Directorate of Medical Education, Government of Kerala, in association with Government Medical College, Thiruvananthapuram and the Department of Emergency Medicine. KEMS 2023 was the first international

summit in Kerala focused on strengthening integrated Emergency and Trauma Care Services, with the vision of bringing world-class Emergency Departments to all medical colleges in the state. The summit brought together national and international experts, policymakers, administrators, and frontline clinicians to deliberate on emergency care systems, trauma policy, pre-hospital care, academic emergency medicine, faculty development, simulation-based training, and disaster preparedness. The programme included pre-conference hands-on workshops, policy-oriented plenary sessions, panel discussions, and a comprehensive academic CME track covering trauma, stroke, airway management, resuscitation, toxicology, Paediatric emergencies, and emerging technologies including AI in emergency care. Special emphasis was placed on standardisation of training, registries, quality assurance, and capacity building at primary and secondary care levels.



Figure 90,91. Kerala Emergency Medicine Summit -2023 organized at GMC Trivandrum

- **National Emergency Life Support (NELS) Program – MoHFW**

The National Emergency Life Support (NELS) Program is a flagship initiative of the Ministry of Health and Family Welfare (MoHFW), Government of India, aimed at strengthening the emergency care response of the country. The program was developed to provide a standardized, India-specific emergency life support training for healthcare professionals. NELS focuses on the early recognition, resuscitation, stabilization, and safe transfer of patients with life-threatening

medical and surgical emergencies. It follows a protocol-based, systematic approach to emergencies such as cardiac arrest, shock, trauma, respiratory failure, poisoning, snakebite, obstetric and Paediatric emergencies.

The program is delivered through structured modules, hands-on skill training, simulations, and scenario-based learning at designated NELS Skill Centres established across medical colleges and hospitals. Training is provided to doctors, nurses, and paramedical staff, with an emphasis on teamwork and rapid decision-making.

The primary goal of the NELS Program is to reduce preventable morbidity and mortality by ensuring that frontline healthcare providers across India are competent, confident, and uniformly trained in essential emergency life-saving skills. The National Emergency Life Support (NELS) Programme, an initiative of the Ministry of Health & Family Welfare (MoHFW), Government of India, aims to strengthen emergency care delivery through standardised training, skill development, and capacity building across medical colleges and healthcare institutions.

At Government Medical College, Thiruvananthapuram, the NELS programme is currently in the implementation phase. The second phase of implementation is nearing completion, with significant progress achieved in infrastructure development, equipment procurement, and training preparedness. The institution is now awaiting initiation of the final phase, which will enable full operationalisation of NELS training activities and consolidation of emergency life support capacity.

- **National Conference of Students Medical Research:** The National Conference of Students' Medical Research (NATCON) is an annual event hosted by the Department of Community Medicine at Government Medical College (GMC), Thiruvananthapuram, The first national program was conducted in 2008, the last one, 15th national conference **NATCON 15** focused on adolescent health under the theme "Healthy Foundations for a Brighter Future". It gives a platform for medical

students to present research, learn from experts, network, and foster collaboration in healthcare.



Figure 92. Inauguration of NATCON 25, National Conference of Students Medical Research by Smt. Veena George, Honourable Health Minister, GoK

- **Basic Emergency course for Doctors:** All junior residents pursuing courses in this institute are undergoing three-day training in basic emergency management conducted by The Apex Trauma and Emergency Learning Centre (ATELC) of Govt of Kerala.
- **Annual State Conference:** Organized by Association of Clinical Physiologists of Kerala and Department of Physiology Government Medical College, Trivandrum. The conference was on Exercise Physiology and Workshop on nerve conduction studies.



Figure 93. Annual State Physiology Conference, GMC Thiruvananthapuram

- **PEDHEART** is an annual conference of paediatricians across Kerala, with hands-on echocardiography/ECG sessions organized in Thiruvananthapuram. This conference is the brainchild of Dr. Zulfikar Ahamed. The first Pedheart conference was conducted in 1998 with the Chief Guest being the pioneer in paediatric cardiac surgery, Dr KM Cherian. The first VC Mathew Oration as part of the PEDHEART conference was delivered by Prof MS Valiathan in the year 2000. The Guests of Honour for this prestigious conference have included the Honorable Chief Minister Shri. A.K.Antony, Governors and Chief Secretaries of Kerala Government and is attended by paediatricians, cardiologists and postgraduates in various disciplines.
- **Paediatric Cardiology Clinical programme (PCCP)** is an annual clinical programme for post graduates in paediatrics and cardiology. Heart Dissection and cardiac intervention workshops started in 2023.

CHAPTER -13

OTHER ACHIEVEMENTS

13.1. Foetal Medicine Department

For the first time in the state, a dedicated foetal medicine department is being established at SAT Hospital, part of Thiruvananthapuram Medical College. Foetal medicine is a specialized area of medicine that focuses on the health of the mother and foetus before, during, and after pregnancy. The health department has issued an official order for this initiative, which will operate as a joint venture between SAT Hospital and the Child Development Centre (CDC). This advanced facility will enable early detection and management of complications and disabilities in unborn babies, significantly improving their health outcomes and helping to reduce neonatal mortality.

What is typically a costly treatment in the private sector will be provided free of charge under govt health schemes, ensuring access to all, according to health minister smt. Veena George, who announced the decision. She said SAT Hospital is now the second govt hospital in India, after AIIMS, to establish a foetal medicine department.

The new department will feature a multidisciplinary team including obstetricians, paediatricians, genetics experts, and foetal medicine specialists. Leveraging state-of-the-art technologies, the department will be equipped to manage even the most complex conditions affecting babies.

Services offered will include prenatal diagnosis to detect birth defects, genetic disorders, and other fetal issues; fetal surveillance to monitor growth and development during pregnancy; fetal therapies such as blood transfusions and surgeries; as well as counselling and support for families facing fetal abnormalities or complications. Dr Pio James from the Obstetrics and Gynaecology Department will lead the new fetal medicine department.

13.2. High Dose Therapy Ward

As per the Master plan, we have submitted a proposal for establishing high dose therapy ward in masterplan. The Superintendent of Medical College, Thiruvananthapuram located and sanctioned 4000 sq.ft of space to develop this facility which was built during 2003-2004

in heritage block of Medical College Hospital. Floor plan and site plan were arranged by INKEL and site approval has been obtained from AERB. Proposal is already under consideration for Financial Sanction from KIIFB (Rs.4.71 Crores).

13.3 Department of Pulmonary Medicine

- DM Pulmonary Medicine super specialty course started in GMC TVPM
- State of the art Lung cancer diagnostic and therapeutic equipment available here - Linear EB
- US, Radial EBUS, Argon plasma coagulator, and Cryotherapy machine.

13.4 Department of Microbiology

Release of Annual report since 2021 under Kerala Antimicrobial Resistance Surveillance Network help the stakeholders to take actions for optimization in use of antibiotics

Microbiology Department recently received significant e-Governance recognition, a Special Jury Award for its contributions to e-Health initiatives.



Fig 94. Significant e-Governance recognition award for AWaRe reporting for Dept of Microbiology, GMC Thiruvananthapuram

13.5. Sree Avittam Thirunal Hospital (SATH)

The Union Health Ministry has designated Kerala's Sree Avittam Thirunal Hospital (SAT) hospital, Government Medical College, Thiruvananthapuram, as a centre of excellence (CoE) for treating rare diseases, making it the 11th such hospital in the country under the Rare Disease Policy 2021.

The decision was formally taken by the Rare Disease Cell, Union Ministry of Health & Family Welfare (MoHFW) dated 26 December, 2022 pursuant to paragraph 9.1 of the National Policy for Rare Diseases, 2021.

In its official memorandum, the MoHFW stated that Sree Avittam Thirunal Hospital (SAT) hospital, Government Medical College, Thiruvananthapuram, will be a premier tertiary care hospital with facilities for diagnosis, prevention and treatment of rare diseases.

13.6. Department of Orthopedics

Dr.Rahul Sreenivasan: Certificate of excellence in reviewing by Asian Journal of Case reports in surgery 2023. Dr.Shiju Majeed & Dr.Rahul Sreenivasan received MRCS

13.7. Department of Anatomy

An Education 3D software developed in collaboration Sree Chithra Tirunal Institute of Medical Science and Technology (SCTIMST) in the year 2024

13.8. Department of Psychiatry

Dr Arun B Nair, Assistant Professor of the Department of Psychiatry has received the following awards for his contributions to mental health awareness, social and literary activities - 1. Vocational Excellence Award of Rotary International, 2. Manava Seva Ratna Puraskaram, 3. P Kesavadev Award, 4. IMA Media Award, 5. Distinguished Alumnus Award TMCAA 6. MAHA PRATHIBHA PURASKARAM by Bharat Sevak Samaj, Planning Board, Govt of India 7. Certified by Asia Book of Records for the largest suicide prevention radio program across a nation.

13.9 College of Pharmaceutical Sciences

Handrub solution was prepared by staff members and PG students of the College of Pharmaceutical Sciences and continuously supplied to the Medical College Hospital during the COVID pandemic.

13.10. Department of Neurosurgery

Dr.Raja K Kutty was elected as the chairman of the ACNS educational society and organized more than 120 webinars incorporating international faculties from all over the world. Dr.Raj S Chandran, Secretary KNS, organized many educational webinars for residents in neurosciences. Chaired sessions in KNS and NSI. Dr.Anil Kumar.P was selected as an assessor of the National Medical Commission for CMC Vellore. Also assessor for the national board for Believers Church Hospital and Jubilee Hospital.

13.11 Department of Forensic Medicine and Toxicology

Organized and conducted South Indian Medico legal conference in 2018, All postmortem cases in Republic of Maldives are being conducted at Govt. Medical College, Thiruvananthapuram.

Harvesting of cardiac valve were done jointly by the Forensic Medicine department and Sree Chithra Tirunal Institute of Medical Science and Technology (SCTIMST)

13.12 Department of ENT

Head of the department, Dr.Satheesh.S was nominated to the specialists board in ENT by the National Board of Examination, New Delhi.

13.13 Department of Microbiology

The department is functioning as a state nodal centre for diagnostics in Sexually transmitted infections (STI). VRDL has 2 automated nucleic acid extractors along with a conventional PCR machine and 3 real time PCR machines, Millipore grade water facility for molecular.

13.14 Department of Reproductive Medicine

The Reproductive Medicine and Assisted Reproductive Technology unit was set up using the PMSSY fund (One and half crores), State Government fund and NHM fund in 2010 a

Landmark & achievement, the unit became fully operational in 2012. The first babies were born by inVitro Fertilization in 2013. This was the **first of its kind in the public sector in South India and the third in India**. The costs of IVF are about one third to one fourth that in the private sector. The first successful IVF for a patient with Epithelial Ovarian cancer who underwent Ovariectomy and chemotherapy in 2016. A get together of the first 100 babies born by IVF conducted in 2018, Registered under the ART act as a Level II clinic (2023) and having a registered ART bank also from 2024.2025- Oocyte Cryo-Preservation as part of Fertility preservation for cancer patients done. There is already an ongoing program for semen Cryo- preservation for cancer patients with more than 200 cryo-preserved samples.

13.15 Department of Paediatric Cardiology

Paediatric Cath Lab has performed more than 850 Paediatric cardiac interventions over the past 6 years. Other procedures done in Paediatric Cardiology Department are Transesophageal echocardiography , Cath study and hemodynamic assessment , Device closure of ASD, VSD, PDA, AP window , Device closure of coronary cameral fistula, RSOV, aorta to LV tunnel, paravalvar leaks Balloon pulmonary valvotomy, Balloon aortic valvotomy , Pulmonary artery balloon dilation/stenting , PDA stenting , RVOT balloon dilator/stenting , Coarctation balloon dilatation and stenting, Device/coil closure of MAPCAs/Pulmonary AV fistulas , Pericardiocentesis

Rare cases surgery done in 2024: 1. Covered stent Occlusion of Sinus Venosus ASD - 3,
2. AP window device Closure, 3. Percutaneous Pulmonary Valve replacement

Open Surgical procedures include Surgical closure of ostium secundum ASD, primum ASD, sinus venosus ASD, AV canal defect repair, VSD surgical closure (beyond infancy), PDA ligation, Coarctation repair beyond infancy , Arterial Switch operation, Surgical correction of TAPVC, Total correction of Tetralogy of Fallot , Surgical closure of RSOV , ALCAPA repair (Coronary translocation) , Mitral/aortic valve repair, Mitral/aortic valve replacement,

Rare cases surgery done in 2025 - Complex Congenital Acyanotic heart diseases' like PAPVC of lower pulmonary veins, PDA interruption in New Born, BT Shunt in New Born, Pacemaker implant in 6 m old baby, Aortic Arch repair in new born.

ECMO - Department has an ECMO machine and we perform ECMO for postoperative patients if required; and selected patients with myocarditis and ARDS

Department Events and Activities

Heart Dissection and cardiac intervention workshops started in 2023

World Heart Day celebrations yearly in SAT hospital, initiated Hridayathalam Project in association with Elida Foundation and conducted a Super Speciality Medical Camp & Basic Life Support Training at Kerala State Council for Child Welfare in 2025

13.16 Department of paediatric Neurology

DM Paediatric Neurology, Diploma in Neurotechnology course are conducted New EEG machines, EMG, A polysomnogram enabled EEG machine were procured for better patient care

13.17 Department of Obstetrics and Gynaecology

The department is actively involved in training in laparoscopy, FetalMedicine, Fertility, Ultrasound, Neonatology, Critical care, Emergency Obstetric Management & Prevention of Preventable Maternal Death Training for Postgraduates & Faculties

13.18 Department of Paediatric Nephrology

Conducting DM course in Paediatric Nephrology. The paediatric Hemodialysis, Plasma Exchange and the Continuous Ambulatory Peritoneal Dialysis (CAPD) are provided through this department

13.19 Department of Emergency Medicine:

Participation in Champions of Change, workshop on "Integrated Emergency Care System Building" conducted by WHO Collaborating Centre for Emergency & Trauma Care (WHO CCET) in collaboration with Directorate of Medical Education, Govt. of Kerala at J.P.N. Apex Trauma Centre, AIMS, New Delhi.

13.20 Department of Neonatology.

DM Neonatology course started with 4 seats in 2019 .and became the first clinical department in Government sector to start this program in Kerala.

CHAPTER 14**STUDENTS ACHIEVEMENTS****14.1 MD/MS Degree Examination November 2025: Rank holders****Table.56 List of Rank holders for MD/MS Degree examination 2025 by KUHS**

Sl No	Department	Name	Rank
1	Biochemistry	Dr Neethu Joseph	2
2		Dr Varna P A	6
3	Community Medicine	Dr Arunima B S	1
4		Dr Marie J Naina	5
5		Dr Neena M Dominic	6
6		Dr Archana P S	9
7	Emergency Medicine	Dr. Sai Krishna M	3
8	General Medicine	Dr Anagha Prem P K	2
9		Dr Rinu N Rajan	7
10	General Surgery	Dr Meryl Liza Thomas	1
11		Dr Jayalekshmi B	7
12	Obstetrics & Gynaecology	Dr Fasmia K	1
13		Dr Gayathri S	2
14		Dr Ajitha P Nair	3

15	Ophthalmology	Dr Jisha P	4
16	Paediatrics	Dr Manu Mathew	2
17		Dr Arya Sekhar	5
18		Dr Shilpa Krishnan	6
19	Physiology	Dr Bhasma Harris	1
20	Physical Medicine & Rehabilitation	Dr Divya Dileep	1
21	Psychiatry	Dr Fevika M	1
22	Radio diagnosis	Dr Sreehari P M	2
23	Respiratory Medicine	DR Ganga C Babu	2
24		Dr Arya V S	5
25	Transfusion Medicine	Dr Hadiya Thahir	1
26		DR Greeshma	3

14.2 Other Achievements

- Dr. Atul Hareendran's research paper titled "*Quality of life, caregiver burden, and mental health disorders in primary caregivers of patients with cirrhosis*" was published in the *Liver International Journal* in 2020.
- Dr.Lakshmi Sujani from Reproductive Medicine presented at YUVA FOGSI March in 2021 "A study to determine the incidence of Hyper response in Antagonist cycles of IVF/ICSI.
- Dr. Fahaduzzaman, M. Ch trainee from the Department of Surgical Gastroenterology, secured second place in the Annual Torrent Young Scholar Award competition.

- Dr. Simna L., from the Department of Medical Gastroenterology at Government Medical College, Thiruvananthapuram, received the prestigious Young Investigator Award from the Asian Pacific Association for the Study of the Liver (APASL) for 2020-2021.
- Dr. Rajeer R., postgraduate from the Department of Anatomy at Government Medical College, Thiruvananthapuram, secured second position in the MD Anatomy examination conducted by Kerala University of Health Sciences (KUHS) in August 2020.
- Dr. Sarath Surendran from the Department of Anaesthesiology at Government Medical College, Thiruvananthapuram, received the Dr. Murali Memorial Gold Medal and Best Postgraduate Student Award in 2020.
- Dr. Ananthu Joseph from the Department of Pulmonary Medicine at Government Medical College, Thiruvananthapuram, secured 1st prize for paper presentation at NAPCON.
- Dr. Midhun Mohan from the Department of Pulmonary Medicine won 3rd prize for his NAPCON paper presentation.
- Dr. Nisna M from the Department of Pulmonary Medicine earned 1st prize in the NAPCON poster presentation category.
- Dr. Neethu from the Department of Pulmonary Medicine received 2nd prize for her poster presentation at NAPCON.
- Dr. Sreethu Syam from the Department of Physical Medicine & Rehabilitation earned first prize for her poster presentation at the National Conference held in January 2020-21.
- Dr. Tharun James, postgraduate from the Department of Medical Gastroenterology at Government Medical College, Thiruvananthapuram, secured 1st prize in the abstract presentation category at the Indian Society of Gastroenterology (ISG) Kerala Chapter meeting in November 2020

- Dr. Shwetha, postgraduate from the Department of Medical Gastroenterology at Government Medical College, Thiruvananthapuram, secured 2nd prize in the abstract presentation category at the Indian Society of Gastroenterology (ISG) Kerala Chapter meeting in November 2020
- DM Neonatology residents Dr Anu Sharma, Dr Anupama, Dr Shabin and dr Krishna won first place in NEOSIM warrior simulation competition in IAP NEOCON Thrissur in 2022.
- Dr Anu Sharma, DM Neonatology resident won third prize for poster presentation in Kerala NEOCON 2021.
- Dr Shabin. P, DM Neonatology resident won third prize for paper presentation in Kerala NEOCON 2022.
- Dr Krishna NW, DM Neonatology resident won second prize for poster presentation in NEOCON 2021.
- Postgraduate residents in Paediatrics Dr Feroz and Dr Aysha received first prize in All India NNF National level quiz on Neonatology in 2023.
- Dr. Anju Krishna, postgraduate from the Department of Medical Gastroenterology at Government Medical College, Thiruvananthapuram, secured 3rd prize in the abstract presentation category at the Indian Society of Gastroenterology (ISG) Kerala Chapter meeting in November 2020
- Ms. Ishita Raj and Ms. Arshita Vinod, undergraduate students from Government Medical College, Thiruvananthapuram, emerged as state-level winners in YIP 5.0 of the Kerala Development and Innovation Strategic Council (K-DISC) Young Innovators Program

14.3 ICMR-Short Term Studentship (STS) projects-Selected Projects

The Indian Council of Medical Research (ICMR) Short Term Studentship (STS) program fosters undergraduate research; the following MBBS students from Government Medical College, Thiruvananthapuram, had projects selected

- Ms. Aparna Murukesan:2021 MMB Batch "Knowledge and Attitude of Medical Students Towards Use of Artificial Intelligence in the Medical Field".
- Ms. Christy:2021 Batch "Caregiver Burden and Quality of Life of Primary Caregivers of Children with Disabilities Attending a Tertiary Care Centre", addressing key public health rehabilitation needs.
- Ms. Arshita Vinod:2022 Batch: "Assessment of Knowledge, Attitude, and Educational Intervention Regarding Cervical Cancer, HPV, and HPV Vaccines Among Non-Medical Students in a District in Southern Kerala", promoting preventive oncology awareness.
- Mr. Nithin:2023 Batch: "Association of Waist Circumference and NAFLD", exploring metabolic syndrome links to liver disease.
- Ms. Andrea: 2023 Batch: "Non-Compliance to Screening Among Household Contacts of Hepatitis B and C Patients", targeting cascade screening gaps.

14.4 Achievements of Postgraduate Students from Department of Forensic Medicine and Toxicology

- Dr. Jamsheena M K – 2nd Prize, *SIMLA 2025*
- Dr. Ajay V S – 3rd Prize, Paper Presentation, *FORENSIC EYE 2024*
- Dr. Harsha Krishnan – 1st Prize, Poster Presentation, *FORENSIC EYE 2024*
- Dr. Harsha Krishnan S – 1st Prize, Online Poster Presentation, *Conference at Himalayan Institute of Medical Science, Dehradun*
- Dr. Ajay V S – 3rd Prize, Online Paper Presentation, *Conference at Himalayan Institute of Medical Science, Dehradun*

Table 57. PG University Exam Rank Holders in Forensic Medicine

Year	Rank	Name
2016	1st	Dr. Augustus Joseph
2017	1st	Dr. Akshara Veena
2018	3rd	Dr. Parinitha
2019	1st	Dr. Vishal Vincent
2020	2nd	Dr. Nikitha Prabhakaran
2021	1st	Dr. Vitni Fernz
	2nd	Dr. Amritha Mathew
2022	1st	Dr. Neethu Pratheep
	2nd	Dr. Sreejith
2023	1st	Dr. Aarsha Raju
	2nd	Dr. Chithra T.D
2025	2nd	Dr. Krishnenth T S

14.5 Extracurricular Achievements:

- Navami Prathap - first position in Nadanpaatt south zone fest
- Devananda A-South zone Table Tennis Women's individuals first runner up, South Zone Table Tennis team champions, TPL table tennis women's champion
- Nihal Gafoor-Cricket men south zone runners up.
- Devananda PH-Thiruvathira south zone 2nd, inter zone 3rd

- Akash BS- KUHS South zone volleyball champions - 1st prize, KUHS south zone arts - skit 2nd prize, KUHS interzone arts - 2nd prize
- Rohith R-Prof Ramachandran Memorial Pathology Gold Medal Exam- Rank 20, Participated in Research paper presentation held during NATCON 2025, GMCT
- Muhammed Raihan S-KUHS South zone (2025)-Quiz-1st, TDH-1st, KUHS Interzone (2025)-Quiz-1st, TDH-1st M P Bhagyalakshmy-
- -Kho Kho interzone 2022 Runner up, -Kho Kho south zone 2023 Champions, -Kho Kho interzone 2023 Champions, south zone 2024 Champions, -Kho Kho interzone 2024 Champions, -Kho Kho south zone 2025 Champions, Quadra -Kho Kho champion (held at TDMC), Drutha -Kho Kho champions (held at CMC), Smriti - Kho Kho champions (held at KMC).
- Banoth Arabind-Interzone - Kabadi champion
- Rida majeed-First prize in video choreo in euphoria, Second prize in short film and prizenostalgia in euphoria
- Aswin Vijayakumar-KUHS South zone Malayalam pros and cons 3rd prize, Malayalam debate 3rd prize, KUHS Inter zone Malayalam pros and cons 1st prize
- Vishnu V S-Interzone volleyball champions men's prize
- Nived R S-Interzone Handball 1st prize, South Zone Group dance 2nd prize Interzone Group dance 2nd prize.
- Arjun S Dev-Poorakali 2nd prize - Interzone 2025, Kabaddi 2nd prize- Interzone 2025 Vanchipaath 1st- South zone 2025, Poorakali 2nd- South zone2025.
- Abhijith RS-KUHS south zone and inter zone arts street play 1st prize
- Agisha E-South zone Oppana 2nd prize and selected to inter zone
- Gayathri Harilal-Champions of the quiz "One health" conducted by ICMR in coordination with community medicine
- Aravind G-participated in south zone and got first for Vachipattu, participated in interzone arts,

- Punnya Sajeev-Margamkai south zone 1st, interzone 2nd
- Asheequa M-NATCON best research paper,Oppana south zone 2nd
- Shamila Hussain-second prize for skit competition in KUHS south zone
- Rameeza Ummu Jabeen-Interzone handball 2nd runners up, Interzone arts group dance runners up,South zone arts group dance runners up
- Shamna.p-South zone Oppana 1 st prize 8n 2024, South zone Oppana 2 nd prize in 2025, Interzone handball 3rd prize in 2025
- Gouri Nanda Ranjith-Won 2nd prize in interzone for margamkali
- Nikhil Binu-Badminton A zone champions 2024-25
- Anugraha A J -Community Medicine One Health Quiz team winner
- Gayathri Sivakumar-Kalinga Interbatch sports 2025: Chess Women's team runners up,Euphoria Interbatch arts 2025: Naadanpattu 1st, group song 3rd
- Halaa Noushad -Interzone face painting 1st Prize
- Aryananda Biswas-Distinction in second yr university exam of KUHS,First position in the final round of quiz on one health by ICMR and IAPSM conducted by,First position in south zone chess team competition,Second position in interzone chess team competition,Selected to inter University team of KUHS for chess
- Kavya K Jayan -Interzone thiruvathira 3rd, South zone thiruvathira 2nd prize,Interzone thiruvathira 3rd prize
- Adithyadev M SOUTH ZONE: First Prize in Naadanpatt, First Prize in Ganamela
- Meghana Subin- 1st for chorenoite in euphoria
- Muhsin J N South zone kolkali 3rd prize A grade.
- Surya B Nair-first prize for Nadaanpaattu and third prize for group song in
- Shivaprasad p-Kho-kho interzone 2024-25champions, Group dance south zone 2025 runners up,Group dance interzone 2025 runners up

- Muhammad Rizwan S -Community Medicine WHD Quiz First, KUHS south zone and interzone Quiz First
- SHILPA RAJ K 2nd prize in plastic surgery preliminary quiz and 2nd prize for group dance in south zone & interzone arts competition.
- Kiran Sankar S-KUHS South zone Arts Fest - Group Dance - 2nd prize, KUHS Interzone Arts Fest - Group Dance - 2nd prize
- Navami M-, Prof Ramachandran gold medal exam first, IAPM south zone quiz 2nd, World Plastic Surgery Day quiz finals 3rd, All Kerala pathology quiz 1st, World Health day quiz college level 1st, TDH south zone and interzone 1st
- Sahla Non academic-interzone group dance 2nd prize, interzone group dance 2nd prize
- Ishani.A.S-Thiruvathira South zone 2024- 3rd prize, Thiruvathira South zone 2025- 2nd prize, Thiruvathira Interzone 2025- 3rd prize
- Devadarshan G-South zone poorakkali 2nd, Interzone poorakkali 2nd, Interzone handball champions, Euphoria arts movie spoof 1st, Euphoria arts video choreo 2nd, adzap 2nd
- Gopika V S Second prize thiruvathira South zone
- Nandana Santhosh South zone oppana 2nd prize
- Navya Suresh-Margamkali-South zone first, Interzone second
- Abhijit MJ- KUHS A zone cricket runners up, Bowler of the tournament
- Keerthana Kannan- KUHS interzone -Kho Kho womens' champions, KUHS south zone -Kho Kho womens champions, KUHS south zone badminton womens 1st runners up
- Samvedya Padinchara K-south zone group dance 2nd, Interzone group dance 2nd
- Atul J-Interzone price in fine arts: Face painting - 1st, Watercolor - 3rd, Oil painting - 3rd, In football team
- Nandana P- Euphoria hindi versification third

- Nivetha M -South zone Table tennis first
- Sona saji-2nd prize for group dance in interzone as well as south zone competition
- Niya E Balan- secured first in kadhaprasangam in south zone
- Aaron R S-Winner of Nature's Cry Photography Contest conducted by Photography club
- Adithya P -got 1st prize in euphoria choreonite
- Lekshmi S Sathees Got distinction (75.9%) in second professional MBBS examination
- Shefna S Oppana south zone first
- Angel Elizabeth Joy- 3rd Prize in Intercollege Quiz Competition,3rd prize in Intercollege Short Story Writing Competition. 3rd prize in Intercollege Short Story Writing Competition
- Ann Mary-KUHS South zone Margamkali - 1st
- Anju T Kassim-Participated and presented in NATCON 2025
- Joshua Mathew-interzone prize for oratory events
- Ashly John-Gained best paper for the Community medicine conference
- Anjali Biju-Inter zone -Margamkali 2nd Prize
- Atul K M -Group Dance 2nd - South zone,Group Dance 2nd - Interzone
- Amal Dev A-Volleyball interzone 1st Prize
- Vignesh P nair-2 time -Kho Kho Interzone champions,1 time -Kho Kho Interzone runner up
- Abhiraj M-Interzone Arts - Poorakali 2nd Prize,South zone Arts - Poorakali 2nd Prize,Interzone Sports - KhoKho Champions
- Anushruti Singh-South zone- Hindi short story (3rd prize),1st Prize for MIME and 2nd Prize for Skit in KUHS South Zone

- Asna Salim-2nd Prize for MIME and SKIT in KUHS Interzone Arts Fest
- Anjali S: Sports-KUHA south zone and interzone -KHO KHO -1st, Kalinga - interbatch sports--Kho Kho-1st, Badminton-2nd, Football-1 st, KUHS south zone and interzone skit -2 prize, Euphoria -interbatch arts, Moviespoof-1st, Mediskit-3rd, Filmifunda-1st, Potpuri-3rd, Vediochoreo-2nd
- Afna AK -Kho Kho champions
- Misriya P 2nd year distinction,South Zone English Jam first, Interzone English Jam first, College Magazine Chaavumura sub editor
- Rukiya Shanavas-Natcon community medicine quiz first, Plastic Surgery Association quiz third, Paediatrics quiz College level third,
- Alfy Rachel Thomas -Pharmacology distinction holder, participation in south zone and intermedicos
- Nanda S Manoj -Secured first prize for Nadanpattu competition in south zone arts festival
- Nieve Mariam Robert 2nd year university distinction
- ANOOP N S-Non academic- mimicry third position in KUHS south zone arts fest 2025.
- Aiswarya Santhosh-2. Pathology Gold medal exam Rank-12
- Hasna Rahim 1st in 'National Level online concept map competition' UG level conducted by Anatomy
- Fathima Sabeena Participated in KUHS Handball Interzone
- Fathima S-Euphoria 3 rd prize creative writing,Interbatch chess 2 nd prize chess team
- Nikhitha chandran-1st prize in group dance
- Sarath Padmanabh A 3rd KUHS south zone Arts Kuchipudi Male 2nd Cricket south zone

- Anagha P Raghu Zonals Malayalam essay 3 rd,Zonals Malayalam essay 3 rd Prize
- Rifa Fathima NM Non academics-arts-oppana south zone second prize
- Sports-south zone and interzone champions--Kho Kho
- Abhiraj M J -Aspire Leaders Programme Winner and Grant Award. Professional Students Summit
- Siya Fathima-South zone sports --Kho Kho first(group event),Interzone arts - streetplay first(group event)
- Vighnesh PG-South zone - skit 2 nd,Interzone - skit 2 nd,South zone cricket-2 nd
- Koppulu Karthikeya- -Kho Kho - inter zone champion ,Intermedicos champion
- Devika -Choreonite first in Euphoria
- Alen Ansalam-Badminton interzone runner up,Ganamela south zone - first,Badminton south zone- champions,Westernband interzone- 3rd
- Kunal Kunal-presented in the National conference held by the Community Medicine department,2nd in Hindi story writing in Euphoria 2025.
- Bhavya S Second position in Margamkali at the interzone competition,Second position in Margamkali at the interzone competition
- Sharda Sujit Nair- Non academic- euphoria solo female western singing- first, wind eastern- 3rd, synchro
- Ghansa Parveen-Euphoria: nadanpattu 3rd , song spoof 1st,South sone : Mime 1st,Interzone : Mime 2nd
- Navala Nazer BM-Consecutive 2 time winner of -Kho Kho interzone, second prize choreonite in interzone
- Anandapadmanabhan P -Second prize in mock the press ,Second prize in Mohiniyattam and skit in interzone
- Joshayah K Pallath-South Zone - Western Solo 1st,South Zone - Western Group Song 3rd,Interzone - Western Group Song 3rd

- Vishnunath TV-South Zone Chess 1st (Team),
- Sangeetha MR-KUHS South zone Arts Oppana 2nd prize,KUHS Interzone arts Margamkali 2nd prize
- Devika Das H-Interzone arts -Thiruvathira third prize
- Aavany A-2nd year university distinction,Interzone thiruvathira third
- Madhav Krishna-Mime south zone and interzone champions,Vanchipaattu south zone and interzone champions,Handball south zone and interzone champions
- Abhinav Suresh-Interzone Digital Painting - 2nd,Cartooning- 3rd
- Arshal Anil- ,South zone : Vattappattu - 2nd prize Ganamela - 1 st prize,Interzone : Vattappattu - 2nd prize
- Sidharth Vattezhath- KUHS South Zone Arts Debate 1st,KUHS Interzone Arts - Debate 2nd
- Gopika Sabu--Distinction,South zone embroidery-First prize,Euphoria- Embroidery - 1 st prize,Rangoli-2nd prize,sanskrit short story-2nd prize,Sanskrit essay writing-2nd prize
- Ganga Unnikrishnan College Topper,Euphoria - English Debate 1st,Malayalam Debate 2nd,English elocution - 2nd
- BS Lekshmi-Interzone arts : Mime - 2nd,South zone South zone arts: Mime - 1st,South zone sports: Khokho -1st,Smrithi(Intercollege sports fest by GMC Kottayam): Khokho- 1
- Nitin SS-Prof Ramachandran memorial pathology gold medal exam1st prize
- Vijay Prasad-Poorakali (interzone arts)- second Prize
- Andrea S-Selected for ICMR Short Term Studentship - 2025 under HRD scheme
- Ananya Arun-Euphoria- cartooning 2nd,Posting making 3rd prize

- Sangeetha MR-KUHS South zone Arts Oppana 2nd prize, KUHS Interzone Arts Margamkali 2nd prize, Performed margamkali in the Amritha TV show Comedy Master Performed at Chembai Sangeetholsavam held at Guruvayoor
- Tasin-Table tennis A zone team championship, Rivera intermedicos table tennis team championship, Inter university table tennis championship
- Mohammed Rameez-Interzone athletics- gold in 400m hurdles and bronze in 1500m South zone arts-3rd in kolkali,
- Mohamed Faris-South zone kolkali 3rd

Annexures

Annexure 1

Courses Offered

Annexure 1 A Medical Courses

Sl no	Courses Offered	Number of Seats
1	MBBS	250
MEDICAL PG DEGREE		
1	MD Anatomy	04
2	MD Anaesthesiology	12
3	MD Biochemistry	04
4	MD Dermatology	06
5	MS ENT	07
6	MD Forensic Medicine	04
7	MD General Medicine	24
8	MS General Surgery	24
9	MD Microbiology	04
10	MS O&G	30
11	MS Ophthalmology	12
12	MS Orthopaedics	18
13	MD Community Medicine	07

14	MD Paediatrics	24
15	MD Pathology	12
16	MD Pharmacology	06
17	MD Physiology	05
18	MD PMR	03
19	MD Psychiatry	12
20	MD Radio diagnosis	09
21	MD Radio Therapy	06
22	MD Transfusion Medicine	03
23	MD Pulmonary Medicine	09
24	MD Emergency Medicine	03
	TOTAL	248

Annexure 1 B Super Speciality Courses

Super Speciality Courses		
Sl no	Courses Offered	Number of Seats
1	DM Cardiology	8
2	DM Neurology	5
3	DM Gastroenterology	6

4	DM Nephrology	3
5	MCh Neurosurgery	6
6	MCh Paediatric Surgery	6
7	MCh Surgical Gastroenterology	2
8	MCh Plastic Surgery	2
9	MCh Cardiovascular & Thoracic Surgery	4
10	MCh Genito Urinary Surgery	6
11	MCh Reproductive Surgery & Medicine	2
12	DM Endocrinology	2
13	DM Paediatric Neurology	2
14	DM Neonatology	4
	TOTAL	58

Annexure 1 C Para Medical / Pharmacy Degree Courses

Para Medical/Pharmacy Degree Courses		
Sl No	Courses Offered	Number of Seats
1	BCVT	5
2	BSc Optometry:	22
3	BSc MLT:	26

4	BSc Per Tech:	5
5	B Pharm:	66
6	B Pharm (LE):	6
7	BSc Dialysis Technology:	16
	TOTAL	146
Para Medical/Pharmacy PG courses		
1	M Pharm:	42
2	MSc MLT:	12
	TOTAL	54

Annexure 2**Details of Service Delivery****Annexure 2 A OP & IP in SAT Hospital, Government Medical College,
Thiruvananthapuram**

SAT hospital		
Year	IP	OP
2016	36965	309303
2017	42389	291909
2018	44709	270447
2019	27636	174648
2020	27636	56373
2021	11076	174648
2022	38380	333964
2023	39165	372786
2024	38835	337276

Annexure 2 B OP statistics in Medical Super Specialities in MCH

Department	Year 2021	Year 2022	Year 2023	Year 2024
Cardiology	82164	115909	117612	118022

Endocrinology	15336	24531	33174	39359
Hematology	11713	15064	18700	19160
Medical Gastroenterology	37884	53813	64035	68870
Medical Neurology	42286	62200	75697	82431
Nephrology	24678	37325	47974	50620

Annexure 2 C Investigations and Procedures done in Radiodiagnosis Department

Parameter	2022	2023	2024
Number of plain MRI Brain	2, 201	2, 160	2, 237
Number of plain MRI for Spine	2, 496	2, 520	2, 641
Number of MRI with Contrast	6, 511	6, 480	6, 567
Number of MR Urography	285	300	290
Number of MR Cholangiopancreatography (MRCP)	1, 094	1, 080	1, 124
Mammography	1, 072	1, 068	1, 227
Angiography (DSA)	475	501	551
Urethrogram	134	135	138
MCUG	771	707	706
Fistulography / Sinography	8	10	9

Ultrasonography (USG)	85,600	87,325	87,435
Doppler – abdominal vessels & scrotal conditions	5,752	6,362	6,321
Doppler – peripheral vessels	15,928	17,300	17,452
Doppler – carotid vessels	4,500	5,312	5,413
Other Doppler studies	1,796	1,872	1,925
USG-guided procedures – FNAC/Biopsy	3,050	3,120	3,230
USG-guided procedures – aspiration/intervention	1,545	1,560	1,578
Total CT scans	93,400	94,122	95,214
Plain CT scans (without contrast)	55,590	55,800	56,120
Plain CT scans – Brain	26,100	25,200	26,352
Plain CT scans – Abdomen	4,990	5,400	5,211
Plain CT scans – Head & Neck	8,898	9,000	9,012
CT Contrast Enterography	52	56	61
CT Contrast Urography	320	340	360
CT Contrast Enema	4,680	4,654	4,784
CT-guided procedures (FNAC/Biopsy)	296	312	316

Total MRI	9,123	9,310	9,644
Plain MRI (without contrast)	2,910	2,880	2,913
Total Plain X-rays	5,50,000	5,80,000	5,92,513
IVP	315	286	321
Barium Swallow	225	207	231
Barium Upper GI Studies	15	16	19
Barium Meal Follow-through	48	47	52
Barium Enema	66	31	34
HSG	—	—	2
Silography	10	7	9
Silography	10	7	9

Annexure 2 D OP Details of MCH

So no	Clinic	Total OP attendance			
		2021	2022	2023	2024
1	Anaesthesia	10563	29760	29873	35516
2	ART CLINIC	152	374	324	149
3	ART PLUS centre	660	423	591	840
4	Cardiothoracic Surgery	5540	8890	9971	9628

5	Cardiology	82164	115909	117612	118022
6	Dermatology &Venerology	31193	46878	57483	58703
7	Emergency Medicine	220513	270104	271049	243572
8	Emergency Medicine- Trauma	6003	2	2725	19706
9	Endocrinology	15336	24531	33174	39359
10	ENT	32246	53411	70738	70306
11	General Medicine	39347	47217	54592	54222
12	General Surgery	49170	69159	69568	69374
13	Hematology	11713	15064	18700	19160
14	Infectious Disease	2181	2902	2759	3828
15	Local OP	5156	9802	14964	15338
16	Medical Gastroenterology	37884	53813	64035	68870
17	Medical Neurology	42286	62200	75697	82431
18	Nephrology	24678	37325	47974	50620

19	Neurosurgery	12540	19303	22792	25831
20	Orthopaedics	73472	97612	102346	105450
21	Psychiatry	23225	32132	45642	41471
22	Physical Medicine & Rehabilitation	13398	19811	23141	25665
23	Plastic Surgery	7745	12331	12891	13383
24	Preventive Clinic	5623	9593	10206	12102
25	Radiotherapy	27888	32375	29994	28079
26	Respiratory Medicine	16749	24693	26904	25560
27	Rheumatology	8513	11268	14958	16644
28	Spine speciality clinic	174	47	31	36
29	Surgical Gastroenterology	5108	6854	7674	8284
30	Urology	36753	51888	53782	56747
31	Valve clinic	409	423	31	10

Annexure 2 E SAT OP Statistics

So no	Clinic	2021	2022	2023	2024
1	Antenatal clinic New cases	6831	8358	8027	7157
2	Antenatal clinic High Risk	5187	6620	7277	6546
3	Antenatal clinic Review	43566	44343	43392	45217
4	Behavioral Paediatrics	2872	5041	7347	9232
5	Family Planning Clinic	2	1944	5917	6552
6	Gynaecology Casualty	14240	16344	12745	10616
7	Gynaecology New OP	5720	7697	7931	8525
8	Gynaecology Review OP	17777	29229	29128	26698
9	Paediatrics Local OP	3054	3838	5191	5175
10	Paediatrics General	29679	43490	45918	44815
11	Paediatrics-New Born - IBN	1740	1928	2242	1714

12	Paediatrics-New Born- OBN	787	828	880	841
13	Paediatric Cardiology	3441	5800	6713	6623
14	Paediatric Casualty	56438	69720	79963	81024
15	Paediatric Diabetic clinic	0	48	219	552
16	Paediatric Gastroenterology	1360	1970	2559	2606
17	Paediatric Nephrology	2887	4467	5321	5500
18	Paediatric Endocrinology	949	1360	2390	2591
19	Paediatric Genetics	1179	1971	1894	1373
20	Paediatric Neurology	1777	1786	1765	2470
21	Paediatric Respiratory	552	692	1670	1643
22	Paediatric Surgery	5171	6945	7694	7637

Annexure 3

List of ongoing Research work by Faculties

Department	Name of Faculty	Research Work:	Remarks
Reproductive Medicine	Dr.Anitha M, Associate Professor,	Correlation of Estradiol Level on days HCG with the number of Oocytes and Mature Oocytes:	
Microbiology	Dr.Manjusree Professor	Hospital-based sentinel surveillance of Streptococcus pneumonia and other invasive bacterial diseases:	ICMR
	Dr.Manjusree,Dr.Saritha N	National Programme on containment of Antimicrobial Resistance:	NCDC
	Dr.ManjusreeL, Dr.Jyothi R,	National Viral Hepatitis surveillance of viral Hepatitis	
	Dr.Manjusree ,Dr.Saritha.N. Dr.Jyothi.R.	Viral Research Diagnostics Laboratory (VRDL) under DHR-ICMR Scheme of establishment of a network of laboratories for managing epidemics and natural calamities:	ICMR
	Dr.Manjusree, Dr.Syed Ali,	Surveillance of Congenital Rubella syndrome:	ICMR
	Dr.Preetha.R	STI Project	(KSACS)

Surgical Gastroenterology:	Dr.Anantha Krishan, Dr.Ramesh Rajan, Dr.Santhosh Kumar	Efficacy of perioperative hydrocortisone in reducing postoperative complications after pancreatic resections a randomized controlled trial	Faculty research
	Dr.Rizwan Ahmed P	Role of Pancreatic Attenuation Index in assessing pancreatic fat content and post pancreatectomy Outcomes	Faculty research
		Relevance of preoperating inflammatory biomarkers in patients undergoing pancreaticoduodenectomy	Faculty research
	Dr.Swasthik KS	Accuracy of intraoperative fluid amylase in predicting postoperative pancreatic fistula.	Faculty research
		Quality of life and morbidity in complicated colonic diverticulitis.	Faculty research
	Dr. Agestino V Antony	Change in liver fat content in patients following pancreatic resections	Faculty research
	Dr. Santhosh Kumar	An observational study on proportion of positive peritoneal wash cytology in gastrointestinal Malignancies	Faculty research

Anatomy	Dr.Aswathy Maria Oommen	1.Genetic and Environmental Risk Factors for Orofacial Clefting Infants and children attending a Tertiary Care Centre.	PhD Research
	Dr.Smitha S Nair	Lateral ankle ligament complex A Morphometric study in cadavers	Ongoing faculty
	Dr.Reba Babu Alex	Lateral ankle ligament complex A Morphometric study in cadavers Co-investigator in virtual reality based solution for effective neuroanatomy teaching.	Ongoing faculty research
	Dr.Maya S	Comparison of Jigsaw method and faculty demonstration in teaching functional anatomy of musculoskeletal system	Ongoing faculty research
	Dr Shefna	Comparison of Jigsaw method and faculty demonstration in teaching functional anatomy of musculoskeletal system	Ongoing faculty research
	Dr. Doris George Yohannan, Dr.Aswathy Maria Oommen, Dr.Umesan.K.G	1 Co Investigator in "Virtual Reality based solution for effective neuroanatomy teaching"	Funded by DST

	Dr. Leena .A.V	Morphometric measurements of talus in South Keralites	Ongoing faculty research
	Dr.Sreekumar.R	Analysis of Anterior circulation cerebral anatomy pattern in mechanical thrombectomy for acute ischaemic stroke	PhD Ongoing
	Dr. Doris George Yokhanan	2.White matter anatomy and teaching methods 3. Hand-Gestures in Anatomy teaching	Ongoing faculty research
Paediatric Neurology	Dr.Mary Iype	Co-investigator in the spectrum of impairment and depression of disability cognitively challenged children in Kerala, funded by the Centre for Disability Studies, TVPM. Co-investigator in the qualification of cognitive abilities in children using the new Malayalam version of international classification of Functioning, Disability and Health - Children and Youth version (ICF-CY) was funded by the State Commissionerate Person with Disability, TVPM PI for the project evaluation of the effect of training in magical sciences and a variety of	Funded by the Centre for Disability Studies. Funded by the State Commissionerate Person with Disability Funded by Magic Planet, ICMR project

		<p>art forms on behavioral and other outcomes among differently abled children, funded by Magic Planet, Kazhakootam</p> <p>PI for the study on cognitive and motor sequelae and long-term outcomes of seizures among children with infantile spasm</p> <p>Joint PI for ICMR project genetic characterization and clinical correlations of poly microgyria syndromes</p>	
Endocrinology	<p>Dr.P.K. Jabbar,</p> <p>Dr.P.K. Jabbar, Dr.Abilash Nair</p>	<p>ICMR-PCOS Multi-Centre Task task force study.</p> <p>ICMR-community based cluster randomized lifestyle intervention for Prevention of gestational diabetes mellitus in married nulliparous women of 18-35 years ago.</p> <p>DHR-Cohort development and risk factor assessment for Insulin resistance and type 2 diabetes in young non-obese Indians -the role of fat distribution, inflammatory markers, adipokines and genetic factors</p>	<p>ICMR</p> <p>ICMR</p> <p>DHR</p>

	Dr. Ramesh Gomez,	<p>Clinical profile, penetrance and genotype phenotype correlations in south Indian subjects with multiple endocrine neoplasia type 1 syndrome gene mutation (MRU)</p> <p>Endocrine Abnormalities in Survivors of Childhood Leukemia (SBMR)</p> <p>Community Based Cluster Randomised Lifestyle Intervention for Prevention of Gestational Diabetes Mellitus in Married Nulliparous Women of 18-35 years age.</p> <p>Clinical profile of patients with Thyrotoxicosis At A Tertiary Care Centre in South India (SBMR)</p>	<p>MRU</p> <p>SBMR</p> <p>ICMR</p> <p>SBMR</p>
Anesthesiology	Dr.Varun S.S	Implementation and adherence to a specialty-specific checklist for Neurosurgery and its influence on patient safety.	Ongoing faculty research
Neonatology	Dr Aswathy Rahul	Neurodevelopmental outcome at pre school age among VLBW neonates born in a tertiary care centre	Ongoing faculty research

<p>Nuclear Medicine</p>	<p>Dr.Jacob Stephenson Dr.Rosenara Beegum.T</p>	<p>Hospital prevalence of malignancy in operated cases of nodular goiter.</p> <p>Trends in histopathologically diagnosed thyroid carcinoma in a tertiary care centre in South India.</p> <p>Psychometric validation of the Malayalam version of EORTC PATSAT –C33 and EORTC OUT PATSAT – 7 to assess the experience of patients attending the cancer care unit of a tertiary care centre in Kerala.</p> <p>A comparative study on the quality of life among Graves Disease subject who received medical treatment, radioactive iodine treatment and surgery</p> <p>Development of an ultrasensitive, rapid and portable system for COVID – 19 screening using Label free Raman Finger printing and AI.</p>	<p>Ongoing faculty research</p>
<p>Transfusion medicine</p>	<p>Dr.Poornima AP</p>	<p>Validation of gel agglutination technology for the screening of fetomaternal hemorrhage in RHD-negative females</p>	<p>Ongoing faculty research</p>

		giving birth to RHD positive babies	
	Dr Fathima V J	Evaluation of the level of hemolysis in leukodepleted and non-leukodepleted red cell units during storage in the blood center of a Kenyan hospital	Ongoing faculty research
Radiodiagnosis	Dr.Jayasree L	Multicentric prospective cohort study to evaluate risk factors, comorbidities, and the impact of various interventions among adolescent and reproductive age women with PCOS.	
	Dr.Ruma Madhu Sreedharan	Advanced MR imaging in multiple sclerosis.	
	Dr.Ajitha J S	MRI Perfusion in Braintumers	
	Dr.Ajay Alex	Radial access for interventional radiological procedures: anatomical feasibility study. Assessment of renal artery stenosis in patients undergoing CT angiography	
Neurosurgery	Dr.Sunil Kumar B.S:	Post-Head Injury Neuro behavioural sequelae: Determiners and seventy among alcoholics.	Faculty Research

	Dr.Raj S Chandran:	Comparison of surgical outcome of anterior fusion alone and circumferential fusion in the management of traumatic cervical spine injury.	Faculty Research
	Dr.Raja K Kutty:	Identification of normal brain tissue, tumor cells, and necrosis using label-free surface-enhanced Raman spectroscopy. Identifying prognostic markers in Traumatic Brain Injury.	Faculty Research
	Dr.Anil Kumar -	Evaluation of a novel drug-releasing system for the treatment of gliomas. Genetic and epigenetic dissection of intracranial aneurysms in the Indian population.	Faculty Research
Dermatology & Venerology	Dr.Anuja Elizabeth George -	Surveillance of drug resistance in leprosy in Urban Leprosy Centre, MCHT.	Faculty Research
	Dr.Reena Chandran and Dr.Smitha Ancy Varghese -	Effect of exercises in the prevention of osteoporosis in pemphigus patients on systemic steroids.	Faculty Research
	Dr.Priya Ashok and Dr.Rony Mathew -	Direct immunofluorescence study of hair follicles in pemphigus vulgaris.	Faculty Research

	Dr.Smitha Ancy Varghese, Dr.Sandhya Nair, and Dr.Anuja Elizabeth George -	Efficacy of DPCP in Alopecia	Faculty Research
Community Medicine	Dr.Chintha	Epidemiology of Pancreatitis and Major Gastrointestinal Diseases: A Multi-centre Study Across India - Immune response following Anti-Rabies Vaccination among patients attending a tertiary care health facility in Kerala.	ICMR Task Force Project SBMR project
	Dr Devraj R	Community Mental Health in developing a Community Mental Health Care Model	PhD Research
	Dr.Reshmi.S	Effectiveness of psycho social intervention provided at primary care setting in preventing symptoms of depression and improving well-being among perinatal women in Kerala – A Cluster Randomised Controlled Trial	PhD Research
	Dr Anitha Abraham	Serological markers for viral Hepatitis, vaccination status,morbidity profile among workers handling	SBMR

		bio medical waste in Government Medical College, Thiruvananthapuram Developing solution focused brief psychological intervention to improve mental wellbeing of care givers of palliative care patients.	PhD Research
	Dr Karthika M	Delay in Diagnosis and Health Seeking Behaviour of Microbiologically Confirmed Pulmonary Tuberculosis- A Mixed Method Study	PhD Research
	Dr.Althaf A	Effectiveness of Enhanced Plate on Glycemic Control of Type 2 Diabetes Mellitus Patients at Primary Health Care level: A Cluster Randomized Controlled Trial	PhD Research
	Dr.Jeena Remesh	Health Literacy in Non communicable diseases	PhD Research
	Dr.Soumya Gopakumar	Level of adherence to treatment and factors associated with it among patients seeking care for Obstructive Airway Diseases from Family Health Centres in Kerala.	PhD Research
	Dr Ramiz Raja A	Health service utilization its determinants and barriers among pregnant	PhD Research

		women and mothers of under five children in Tribal population of Idukki district	
Orthopaedics	Dr.Shiju Majeed A	PhD in Health related quality of Life and radiological outcomes of surgical management of Adolescent Idiopathic Scoliosis.	PhD Research
	Dr.Rahul Sreenivasan Thokaloath	PhD in Functional outcome of Acetabular fractures.	PhD Research
	Dr.Shiju Majeed & Dr.Rahul Sreenivasan Thokaloath	Phase III Clinical trial: A multi-centre, randomized, double blind, parallel group, phase III study to evaluate efficacy, and immunogenicity of Lupin's Denosumab in comparison with Prolia in postmenopausal women with osteoporosis.	Faculty research
	Dr.Shibu R:	Development of a multivariable prediction model for risk of hospital mortality in patients admitted with proximal femoral fracture at Govt, MCTVPM	Faculty research
Pulmonary Medicine.	Dr.Anitha Kumari.	Disease characteristics, disease progression, and treatment outcomes in patients with interstitial lung disease.	Faculty research

	Dr.Sreekala C:	Clinico-epidemiological profile of female COPD in a tertiary care center.	Faculty research
	Dr.Kamala.R:	Implementation of pulmonary rehabilitation programs and assessing the outcomes in patients with COPD in a tertiary care center.	Faculty research
	Dr.Kiran Vishnu Narayan:	Lung ultrasound for assessing COVID lungs and idiopathic interstitial lung disease.	Faculty research
Psychiatry:	Dr.Anilkumar T.V. -	School Mental Health Project.	DHR Project -
	Dr.Anju Mathew:	Prediction model for attempted suicide among adolescents and young adults.	Faculty research
Pharmacy:	Sherin A Hameed.	Design synthesis and pharmacological evaluation of some novel 5-Aryl-1, 3,4-thiadiazole-2-1 mine derivatives.	Faculty research
	Cici Mathew.	Design synthesis and biological evaluation of novel Rhodanine derivatives.	Faculty research
	Anitha Thomas:	A novel approach to modify physicochemical properties of Mefenamic acid, a poorly water-soluble drug-design	Faculty research

		characterization and evaluation.	
	Seema S Nair:	Phytochemical, pharmacological, and molecular docking studies of phytoconstituents from <i>Pothos scandens</i> L.	Faculty research
	Roma Mathew:	Solid self-emulsifying drug delivery system for enhancement of oral bioavailability.	Faculty research
	Geetha P Nair:	Pharmacognostical, pharmacological, biotechnological studies, and phytochemical analysis of some <i>Morinda</i> species.	Faculty research

Annexure 4.**Human Resources****Annexure 4 A: Faculty Position Government Medical College, Thiruvananthapuram**

Department	Professor	Associate Professor	Assistant Professor	Senior Resident
Preclinic and Paraclinical Department				
Anatomy	3	3	12	1
Physiology	3	4	11	1
Biochemistry	2	2	11	3
Pharmacology	2	3	9	3
Pathology	3	4	16	5
Microbiology	1	4	13	2
Forensic Medicine	2	2	11	3
Community Medicine	2	1	12	2
Broad Specialty Departments				
General Medicine	4	6	19	8
Paediatrics	3	3	16	5
Dermatology & Venerology	2	2	8	4
Psychiatry	2	1	9	4

General surgery	4	5	23	9
Orthopaedics	2	4	18	13
ENT	3	2	9	2
Ophthalmology	2	3	20	5
OB&G	3	6	25	18
Anaesthesia	3	5	41	13
Radiodiagnosis	2	2	12	6
Emergency Medicine	1	2	10	3
Physical Medicine & Rehabilitation	1	1	5	2
Transfusion Medicine	1	1	5	0
Geriatrics	1	1	1	0
Radiotherapy	1	1	7	0
Super Specialty Departments				
Cardiac Anaesthesia	0	0	1	0
Cardiovascular Thoracic surgery	3	1	7	2
Cardiology	4	1	10	8
Critical Care Medicine	0	1	0	3
Endocrinology	1	1	3	2

Genito Urinary Surgery	2	2	4	3
Haematology	0	1	1	0
Infectious Disease	0	1	3	1
Interventional Radiology	0	0	2	0
Medical Gastroenterology	2	1	4	2
Medical Genetics	1	0	1	0
Medical Oncology	0	1	2	0
Neonatology	1	1	3	3
Nephrology	1	0	4	1
Neurosurgery	3	3	8	6
Neurology	1	2	6	3
Nuclear Medicine	0	1	3	0
Paediatric Cardiac Surgery	0	1	1	0
Paediatric Cardiology	1	1	2	0
Paediatric Nephrology	1	1	2	0
Paediatric Neurology	1	1	2	1
Paediatric Surgery	3	2	5	2
Plastic & Reconstructive surgery	2	1	3	2

Pulmonary Medicine/Respiratory Medicine	1	3	5	3
Reproductive Medicine and Surgery	1	1	4	0
Rheumatology	0	0	1	0
Surgical Gastro Enterology	1	1	3	1
Surgical Oncology	0	1	1	0
TOTAL	83	98	414	155

Annexure 4 B HR of Biomedical and Central workshop wing

Biomedical Engineering and Central Workshop	Number
Technical Officer	1
Technical Assistant (R&AC)	1
Technical Assistant (Electronics)	1
Technical Assistant (Machinist)	1
AC Mechanic	3
Mechanic	3
Electrician	2
Refrigeration Mechanic	2

Fitter	1
Carpenter	1
Painter	1
Lift Mechanic	1
Helper	1
Instrument Mechanic	1

Annexure 4 C Human Resource of Health Units

Category	IFHC Pangappara	RHTC Vakkom
Junior Superintendent:	1	1
Clerk	3	1
Clerk Typist	1	0
Office Attendant	2	1
Hospital Attendant,	6	4
Nursing Assistant	2	3
Ophthalmic Assistant	1	1
Pharmacist	2	1
Lab Technician:	2	1
ECG Technician:	1	0

Driver:	1	1
Part Time Sweeper:	1	0
Head Nurse	1	0
Staff Nurse	4	5

Annexure 4 D Temporary Administrative staff in Government medical College, Thiruvananthapuram (HDS, KHRWS, SATHHES)

Administrative (Temporary)	Staff Number
Director	1
Administrative Officer	1
Accounts Officer	1
Regional Manager	1
Office Superintendent	1
Accounts Assistant	2
Junior Accountant	2
Peon	3
Office Assistant	3
Office Assistant/Cashier	15
Clerk cum Cashier	43
	73

Annexure 4E Temporary Staff Nurses Appointed under HDS, KHRWS and Other Schemes

Nursing Staff (Temporary)	Number
Staff Nurse	126

Annexure 4F: Temporary Supportive Staff Appointed Under HDS, KHRWS and Other Schemes

Supportive Staff (Temporary)	Number	Supportive Staff (Temporary)	Number
Site Administrator	1	Counter Staff	3
System Administrator	1	Generator Operator	3
Telephone Operator	1	OBN Announcer	3
Andrology Lab Assistant,	1	Labor room assistant	6
IBN Assistant:	1	Attender	7
Ultrasound Scan Assistant,	1	Driver	9
Cooking Assistant	1	Junior Lab Assistant	11
Pay ward Assistant Gr I Sr	1	Sr.Store Assistant	11

Information Assistant:	2	Programme Assistant,	14
Admission Counter Assistant,	2	Helper	22
Junior Store Assistant, and	2	GD Assistant	25
Pay ward Keeper	2	Security Guard	64
Lift Operator	2	GD Attendant	73
		Cleaning staff	104
Total			373

Annexure 4 G: Temporary Technical Staff under HDS, KHRWS and Other Schemes

Technical Staff (Temporary)	Number	Technical Staff (Temporary)	Number
AC Technician	1	CT Technician	2
MR Technician	1	DSA Technician	2
Perfusionist	1	Dialysis Technician	2
Scientific Assistant	1	Anaesthesia Technician	2
Theatre Technician	1	JPHN	2
Biomedical Assistant	1	Electronic Technician	2

Media Consultant	1	Technician	3
Mechanic	1	Computer Operator	3
PRO	1	Physiotherapist	3
Endoscopy Technician	1	Cath Lab Technician	4
Electrician	1	ECG Technician	10
Plumber	1	Data Entry Operator	20
Chief Lab Technician	1	Lab Technician	57
Computer Technician	1	Pharmacist	82
Bio Medical Engineer	2		
Total		210	

Annexure 4 H Permanent Administrative staff in GMC Thiruvananthapuram

Senior Store Officer (Technical)	1
Senior Grade Typist	1
Fair Copy Superintendent	2
LD Typist	2
Senior Grade Typist	2
Store Superintendent	2

Lay Secretary and Treasurer	2
UD Typist	5
Librarian	6
Selection Grade Typist	6
Junior Superintendent	8
Clerical Attender	9
Confidential Assistant	16
Clerk	98
	160

Annexure 4 I: Permanent Nursing Staff in GMC Thiruvananthapuram

Chief Nursing Officer	2
Nursing Superintendent	7
Head Nurse	10
Deputy Nursing Superintendent	14
Senior Nursing Officer	130
Nursing Officer	287
	450

Annexure 4 J: Permanent Administrative Staff in GMC Thiruvananthapuram

Technical Staff	Number	Technical Staff	Number
Clinical Audiometrician Gr 11	1	Electrician	2
Clinical Psychologist	1	Health Inspector	2
Cyto Technician	1	Junior Research Officer	2
Entomological Assistant	1	Mechanic	2
Health Educator	1	Medical Photographer	2
Mortuary Technician Gr-I	1	Perfusionist	2
Museum-cum-Photographic Assistant	1	Refrigeration Mechanic	2
Painter	1	Health Supervisor	2
Pharmaceutical Chemist	1	Cath Lab Technician Gr	2
Pump Operator	1	Junior Public Health Nurse	2
Social Worker (8 Yrs HG)	1	EEG Technician	3
Statistical Assistant	1	Instrument Mechanic	3
Workshop Foreman/Forman	1	Lab Technician	3
Lady Health Inspector	1	Social Scientist	3
AC Mechanic	2	Technical Assistant Electronics	3

Blood Bank Technician	18	ECG Technician	4
Driver	19	Lineman	4
Rehab Technician	23	Overseer	4
Pharmacist	25	Junior Health Inspector	4
Senior Technician	37	Artist Curator	5
Radiographer	45	Theatre Mechanic	6
Laboratory Technician	55	Anaesthesia Technician	8
CSR Technician	8		
Total		316	

Annexure 4K Permanent Supporting Staff in GMC Thiruvananthapuram

Supporting Staff	Count	Supporting Staff	Count
Binder	1	Laboratory Assistant (Dialysis)	6
Enquiry Officer	1	Dhobi	9
House Keeper	1	X-Ray Attender	9
Treatment Organizer	1	Sergeant	10
Assistant Security Officer	2	Junior Laboratory Attender	10
Bus Cleaner	2	Lift Operator	10
Curator (Laboratory Wing)	2	Medical Record Librarian	11

Marker	2	Watchman	11
Research Assistant	2	Part Time Sweeper	23
Animal Attender	3	Office Attendant	33
Cobbler	3	Junior Laboratory Assistant	50
Cook	3	Sweeper	71
Gardner	3	Nursing Assistant	385
Receptionist	3	Hospital Attendant Gr 1	420
Barber	3	Power Laundry Attender	5
Telephone Operator	4		
Total		1099	

Annexure 5:**Completed infrastructure projects Government Medical College,
Thiruvananthapuram**

Sl.No:	Project/facility	Description/Funds
1	E-Health System	A virtual queue management system has been established, allowing patients to book appointments remotely via Akshaya centers and receive SMS reminders, reducing waiting times and overcrowding
2	Renovation of Wards	- Vertical expansion above Ward 7 and Ward 5 of the main heritage hospital block - Completed with ₹2.25 crore and ₹1.12 crore. Respectively. - Ward 22 renovation – ₹70 lakh. - Renovation of rooms adjacent to Ward 22 – ₹55 lakh. - Super Specialty Block toilet renovation – ₹80 lakh
3	New Endocrinology ward	A new ward was constructed for Endocrinology by spending ₹1.70 crore
4	Expansion of De-addiction Centre	Expansion of infrastructure facility in De-addiction Centre done through construction of vertical expansion worth ₹94 lakhs
5	Renovation of academic blocks	This includes the Radiotherapy department renovation with ₹2.50 crore, the Academic Block renovation – ₹2 crore, the Pathology Block renovation – ₹2 crore, and the Biochemistry Department renovation – ₹56 lakh. Second floor construction

		above MLT Block – ₹2.50 crore, Examination Hall construction at Pharmacy College (CPS) – ₹1 crore.
6	Construction of roads	Construction of pedestrian pathway from college to main gate – ₹1 crore, Road to Multispecialty Block – ₹1 crore, Campus road renovation – ₹3.70 crore
7	Student vehicle parking facility	₹80 lakh
8	Renovation of hostels	Boys' Hostel renovation – ₹1.55 crore, Renovation of Boys' Hostel Block 4 – ₹2 crore, Block 2 – ₹1.40 crore, PG Boys' Hostel renovation – ₹1.50 crore, Renovation of PIPMS Hostels – ₹1 crore, Third floor construction of PIPMS Women's Hostel – ₹1 crore
9	Limb Centre renovation	Limb centre under PMR department – ₹90 lakh
10	Vakkom Health Centre renovation	Renovation work at Rural Health training Centre Vakkom-₹1.10 crore
11		Phase 1 of the comprehensive development master plan implemented with ₹58.37 crore: road development and flyover completed; multi-level parking and electrical works ongoing. Renovation of Ward 7 for maternity care nearly completed. Air-conditioned consultation rooms. OP consultation rooms repainted, air-conditioned, and tiled. • Renovated Paediatric Casualty , Neonatal heart, hearing, and genetic disorder screenings centralized, •

		Adequate seating and airport-style chairs for patients, Provision of chilled drinking water, snack canteens established, • TVs installed for public health awareness and entertainment. • Color-coded signage for easy OP navigation, Toilets for patients and bystanders, including facilities for differently-abled and transgender individuals. • Public announcement system launched
12	Residential complex for staff	Residential complex for staff - ₹2.99 crore

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