# TATA MEMORIAL CENTRE

A Grant-in-Aid Institute, Department of Atomic Energy,
Government of India.

## Tackling Cancer and Covid together

ANNUAL REPORT 2020 - 2021

**Dr Sekhar Basu**
**(20.09.1952 – 24.09.2020)**

Chairman, Atomic Energy Commission (AEC)
&
Secretary, Department of Atomic Energy (DAE)
(23.10.2015 – 17.09.2018)

Director, Bhabha Atomic Research Centre (BARC)
(2012 to 2015)

Awarded the Padma Shri in 2014.

# ANNUAL REPORT
# 2020 - 2021

**Tata Memorial Centre**

(A Grant-in-Aid Institute of the Department of Atomic Energy, Government of India.)

- **Tata Memorial Hospital, Mumbai.**
- **Advanced Centre for Treatment, Research and Education in Cancer, Navi Mumbai.**
- **Centre for Cancer Epidemiology, Navi Mumbai.**
- **Homi Bhabha Cancer Hospital and Research Centre, Visakhapatnam.**
- **Homi Bhabha Cancer Hospital, Sangrur.**
- **Mahamana Pandit Madan Mohan Malaviya Cancer Centre, Varanasi.**
- **Homi Bhabha Cancer Hospital, Varanasi.**
- **Dr Bhubaneswar Borooah Cancer Institute, Guwahati.**

# The Governing Council

## Chairman

**Shri Kamlesh Nilkanth Vyas**
Chairman, Atomic Energy Commission &
Secretary, Department of Atomic Energy,
Government of India.

## Members, Ex-Officio

**Mr Sanjay Kumar**
Joint Secretary (Admin & Accounts),
Department of Atomic Energy,
Government of India.

**Dr. RA Badwe**
Director,
Tata Memorial Centre,
Mumbai.

## Co-opted Members

**Mrs Richa Bagla**
Joint Secretary (Finance),
Department of Atomic Energy,
Government of India.

**Dr Snehalata Deshmukh**
Ex-Vice Chancellor,
University of Mumbai.

## Members

**Dr. NK Ganguly**
Former Director General,
Indian Council of Medical Research, New Delhi.

**Shri Jayant Kumar Banthia**
Ex-Chief Secretary,
Government of Maharashtra.

**Mr Vijay Singh**
Vice Chairman,
Sir Dorabji Tata Trust, Mumbai.

**Mr Lakshman Sethuraman**
Head of Support Services,
Sir Dorabji Tata Trust, Mumbai.

## Permanent Invitees

**Dr. SD Banavali**
Director of Academics,
Tata Memorial Centre, Mumbai.

**Dr. CS Pramesh**
Director,
Tata Memorial Hospital (TMH), Mumbai.

**Dr Sudeep Gupta**
Director,
Advanced Centre for Treatment Research & Education in Cancer (ACTREC), Navi Mumbai.

**Dr Rajesh Dikshit**
Director,
Centre for Cancer Epidemiology (CCE), Navi Mumbai.

**Mr Sanjeev Sood**
Director Admin. (Projects),
Tata Memorial Centre, Mumbai.

**Dr. Amal Ch. Kataki**
Director,
Dr. B. Borooah Cancer Institute (BBCI), Guwahati.

**Dr Satyajit Pradhan**
Director,
Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC) &
Homi Bhabha Cancer Hospital (HBCH), Varanasi.

**Dr. Umesh M. Mahantshetty**
Director,
Homi Bhabha Cancer Hospital & Research Centre (HBCHRC), Visakhapatnam.

**Dr Rakesh Kapoor**
Director,
Homi Bhabha Cancer Hospital & Research Centre (HBCHRC), Mullanpur.

## Secretary

**Mr. AN Sathe**
Chief Administrative Officer,
Tata Memorial Centre, Mumbai.

# Mission and Vision of Tata Memorial Centre

## Mission

The Tata Memorial Centre's mission is to provide comprehensive cancer care to one and all, through its motto of excellence in service, education and research.

## Vision

As the premier cancer centre in the country, we will provide leadership in guiding the national policy and strategy for cancer care by:

- Promoting outstanding services through evidence-based practice of oncology.
- Commitment of imparting education in cancer to students, trainees, professionals, employees, and the public.
- Emphasizing on research that is affordable, innovative, and relevant to the needs of the country.

# Contents

# TMC Director's Message

The ominous position of Big C was nudged by another C, Covid-19. The year passed by in the fear of the viral pandemic. TMC channelized its forces to combat Covid-19 while continuing cancer care. This was a deliberate decision after understanding what was at stake by converting beds from cancer care to covid-19 care. The deaths due to cancer are about 600 per million in India every year. In contrast lives lost due to covid-19 last year were less than 100 per million per year. If cancer diagnosis and treatment was denied leading to late diagnosis there would be about 20% drop in cure rate leading to over 150 additional deaths per million. Hence a conscious decision was taken to continue caring for both ailments. Across all centres we have looked after over 6000 covid-19 cases with cancer and over 70,000 cancer cases. We reduced the footfall in each of the centres by running tele/video consultation services. We evolved a strategy to filter patients and staff with suspected viral infection and guided them to be in isolated area where covid-19 cases were looked after. The rest of the patients and staff continued cancer care with precautions that included mask, hand hygiene and social distancing. The staff did not use protective overalls in this area. The isolation area had staff using protective overalls in addition to the precautions mentioned earlier. This allowed continued care without undue risk to staff resulting into less than 2.5% of staff being affected by covid-19 over any fortnight during this year. Our contribution towards diagnostic tests for covid-19 has been remarkable and the group in ACTREC was the first to document mutations in the virus in few patients from Mumbai. All the PCR machines in all centres across India doubled their output to accommodate RTPCR testing for Covid-19. There were multiple publications that shared our experience on processes that were cost-effective in running covid-19 and cancer care facility simultaneously. Through Navya, we were able to garner support from across the globe with donations of about 6000 oxygen concentrators, over a million masks and gloves. These were distributed across India to support covid-19 affected patients. We also offered vaccination to our staff and all the population around our every centre across India.

The year saw one of the most important contributions to screening for breast cancer globally from Tata Hospital. The 20 year results of one of the largest screening trials for breast cancer using Clinical breast examination (CBE) performed by health care workers showed a 30% reduction in breast cancer mortality. There have been trials that have shown benefit of mammography alone or in combination with CBE in breast cancer mortality to the tune of 30%. The Canadian breast cancer trial had demonstrated that mammography did not add anything to CBE but there was no study to date that tested CBE alone. Ours was the first study to test CBE and showed that it not only saved 30% lives but did not have any overdiagnosis. No woman was unnecessarily treated, a matter that affects almost 1 in 3 women who undergo mammography. This was a major contribution to public health interventions in India and globally especially low and middle income countries. These countries have a health care delivery system that can neither offer screening mammography nor can sustain a 30% rise in the number of patients due to overdiagnosis.

Cancer care services were augmented at Varanasi, Punjab (Sangrur), Muzaffarpur, Guwahati and Vishakhapatnam. As part of our commitment to help developing countries through MEA, we are

planning cancer care facility for Maldives and collaborating with Vietnam for training human resource for cancer care. We have been approached by Indonesia to train nurses and navigators in Oncology while our effort to train Africa for Oncology manpower continued over this year. New courses were started at BBCI Guwahati, paving way to create manpower locally. Similar efforts are underway in Punjab (Mullanpur and Sangrur) and Simandhra (Vishakhapatnam).

Overall testing times where all staff medical and non-medical stood steadfastly to deliver the best care to all.

**Dr. RA Badwe**

# The Tata Memorial Centre (TMC) Cluster

Director, TMC; Dr. RA Badwe

Director Academics, TMC; Dr. SD Banavali

Deputy Director Academics, TMC; Dr. SS Laskar

Chief Administrative Officer, TMC; Mr. AN Sathe

Chief Engineer, TMC; Mr. GS Dhanoa

Chief Security Officer, TMC; Mr Johnson Lukose

Joint Controller of Finance & Accounts, TMC; Mr Suryakant Mohapatra

Head Information Technology, TMC; Mr. VN Marathe.

***Other than the above mentioned, only the permanent medical staff of TMH, ACTREC & CCE are directly affiliated to of TMC.**

## Tata Memorial Hospital (TMH), Mumbai

Director, Dr. CS Pramesh

Deputy Director, Dr. SV Shrikhande.

## Advanced Centre for Treatment, Research & Education in Cancer (ACTREC), Navi Mumbai

Director, Dr Sudeep Gupta

Deputy Director Cancer Research Institute, Dr Prasanna Venkatraman

Deputy Director Cancer Research Centre, Dr Navin Khattry.

## Centre for Cancer Epidemiology (CCE), Navi Mumbai

Director, Dr Rajesh Dikshit

Deputy Director, Dr Pankaj Chaturvedi.

## Other Cancer Centres / Hospitals across India under TMC

Director Admin. (Projects), Mr Sanjeev Sood.

**Homi Bhabha Cancer Hospital & Research Centre (HBCHRC), Visakhapatnam**

Director, Dr. Umesh M. Mahantshetty

Officer in Charge, Dr. DC Chaukar (TMH).

**Homi Bhabha Cancer Hospital & Research Centre (HBCHRC), Mullanpur**
**Homi Bhabha Cancer Hospital (HBCH), Sangrur**

Director, Dr Rakesh Kapoor

Officer in Charge, Dr. PS Pai (TMH).

**Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC), Varanasi**

Director, Dr Satyajit Pradhan

Deputy Director, Dr Durgatosh Pandey

Dean Academics (MPMMCC & HBCH), Dr. Shashikant CU Patne

Officer in Charge, Dr Pankaj Chaturvedi (CCE).

**Homi Bhabha Cancer Hospital & Research Centre (HBCHRC), Muzaffarpur**

Officer in Charge, Dr Pankaj Chaturvedi (CCE).

**Homi Bhabha Cancer Hospital (HBCH), Varanasi**

Director, Dr Satyajit Pradhan

Deputy Director, Dr Bal Krishna Mishra

Officer in Charge, Dr Pankaj Chaturvedi (CCE).

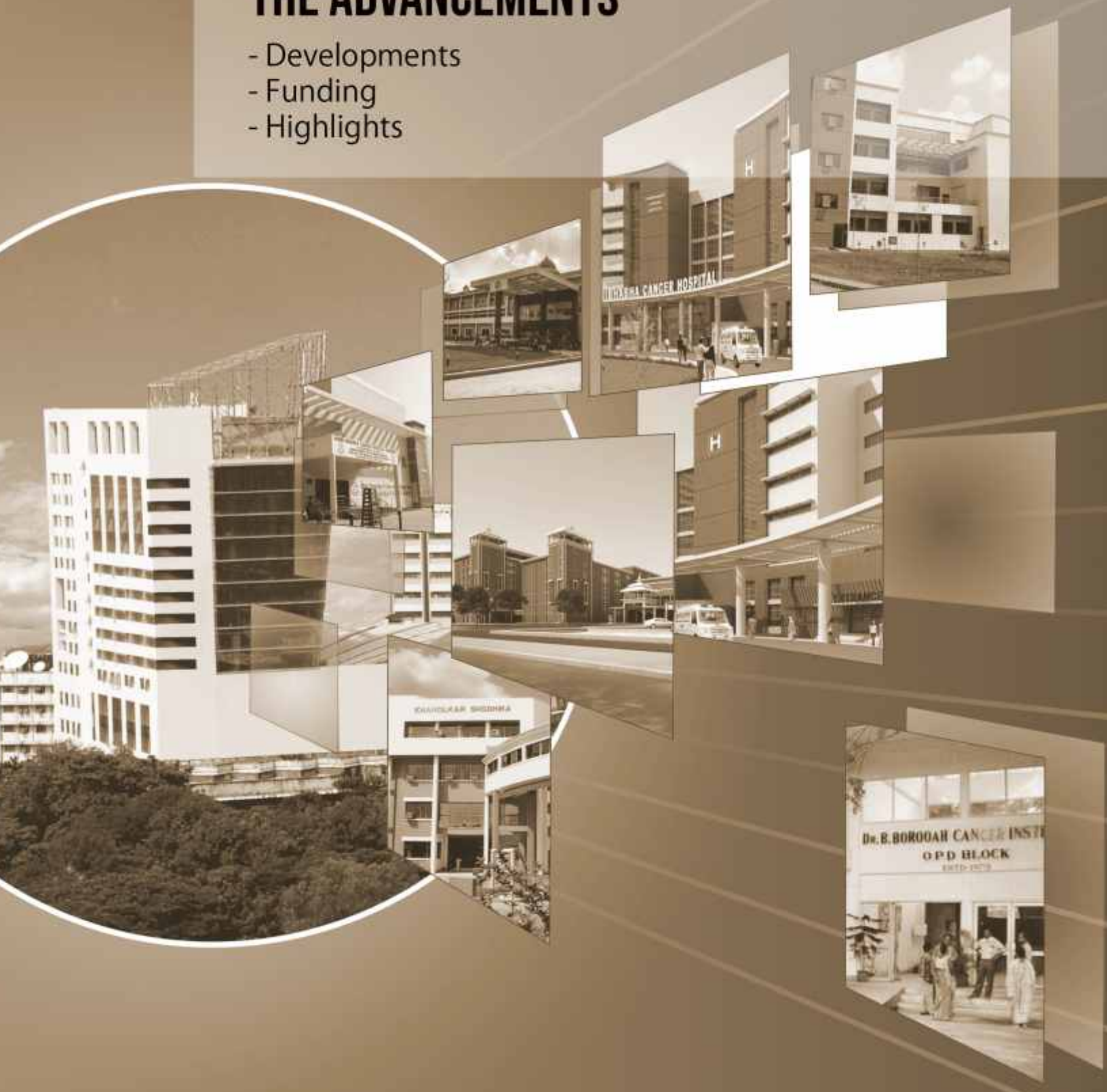
**Dr Bhubaneswar Borooah Cancer Institute (BBCI), Guwahati**

Director, Dr. Amal Ch. Kataki

Officer in Charge, Dr Sarbani Ghosh-Laskar (TMH).

# THE ADVANCEMENTS

- Developments
- Funding
- Highlights



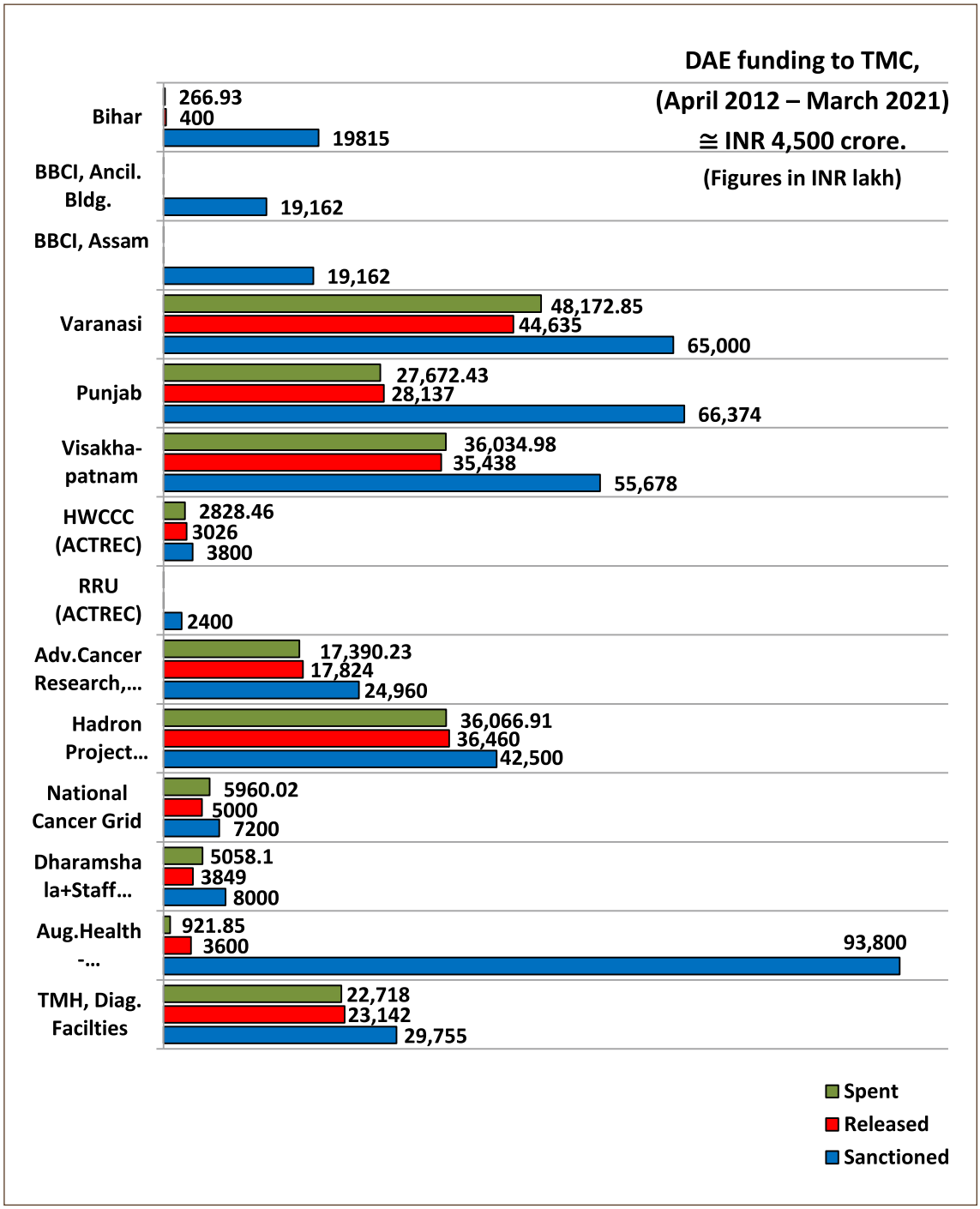
## Developments

| Name | Date of proposal | Date of commi-ssioning | Functiona-lity as of 2020 | Pending issues | Funds Sanctioned (in lakhs) | Funds Granted (in lakhs) | Funds Utilized (in lakhs) |
|---|---|---|---|---|---|---|---|
| Tata Memorial Hospital **(TMH), Mumbai (629 - bed)** | October 8, 1935. | February 28, 1941 | **Self sufficient to detect, diagnose & treat cancer patients.** | 1. **Doctors Quarters** in Haffkine functional from **September 2020**<br>2. **Dharamshala** to be commissioned by July 2021<br>3. Architects, (M/s Hosmac India Private Limited & Project Management Consultants (M/s. iDeCK) were appointed for the construction of the **main hospital building**<br>4. **Advanced facilities for Diagnostics & Services.** | **8,000**<br><br>**93,800**<br><br>**29,755** | **3,849**<br><br>**3,600**<br><br>**23,142** | **5,058.10**<br><br>**921.85**<br><br>**22,541.90** |
| Advanced Centre for Treatment, Research & Education in Cancer **(ACTREC), Navi Mumbai (120 - bed)** | VII Plan in 1983. 40 acres by CIDCO in 1985; 20 acres from CIDCO in 1990. | March 30, 2005. | **Self sufficient to detect, diagnose & treat cancer patients.**<br><br>**Expansion** planned | 1. **Cyclotron** is at site and to be commissioned after testing by end 2021<br>2. The Radiological Research Unit (**RRU**) building completed and to be commissioned by end 2021<br>3. **Advanced** Nuclear Medicine & Cancer Research **Facilities**<br>4. The Hematolym-phoid, Women & Children | **42,500**<br><br>**5050**<br><br>**24,960**<br><br>**3,800** | **36,460**<br><br>**2650**<br><br>**17,824**<br><br>**3,026** | **35,933.52**<br><br>**2650**<br><br>**17,376.07**<br><br>**2,825.11** |

| Name | Date of proposal | Date of commissioning | Functionality as of 2020 | Pending issues | Funds Sanctioned (in lakhs) | Funds Granted (in lakhs) | Funds Utilized (in lakhs) |
|---|---|---|---|---|---|---|---|
| | | | | Cancer Centre (**HWCC**) almost complete and to be commissioned in end 2021. | | | |
| Centre for Cancer Epidemiology **(CCE), Navi Mumbai (Not for treatment)** | XI Plan in 2009. | 2015 | **All proposed and approved departments functional.** | - | **3,100** | **1,511.84** | **1,547.97** |
| Homi Bhabha Cancer Hospital & Research Centre **(HBCHRC), Visakhapatnam (125 - bed)** | XI Plan in 2011. | June 2, 2014. | The **Patient Registration, Service & Radiation Blocks** were operational. **Surgical and ICU facilities** continue at VPT. | **Main Hospital building** to be commissioned by **middle of 2021.** | **55,678** | **35,438** | **36,027.42** |
| Homi Bhabha Cancer Hospital **(HBCH), Sangrur (105 - bed)** | XII Plan 2012. | January 20, 2015. | **Self sufficient to detect, diagnose & treat cancer patients.** | Facility for **telemedicine.** | **66,374** | **28,137** | **28,504.56** |
| Homi Bhabha Cancer Hospital & Research Centre **(HBCHRC), Mullanpur (350 - bed)** | XII Plan October 12, 2012. | - | **All the buildings are almost ready.** | **To be commissioned by in the third quarter of 2021.** | **(for both hospitals in Punjab)** | **(for both hospitals in Punjab)** | **(for both hospitals in Punjab)** |
| Homi Bhabha Cancer Hospital **(HBCH), Varanasi (179 - bed)** | February 2017. | May 1, 2018. | **Self sufficient to detect, diagnose & treat cancer patients.** | **Residential quarters**, **kitchen** & **laundry** facilities are **under construction.** | **65,000 (for both hospitals in Varanasi)** | **44,635 (for both hospitals in Varanasi)** | **48,152.97 (for both hospitals in Varanasi)** |

| Name | Date of proposal | Date of commissioning | Functionality as of 2020 | Pending issues | Funds Sanctioned (in lakhs) | Funds Granted (in lakhs) | Funds Utilized (in lakhs) |
|---|---|---|---|---|---|---|---|
| Mahamana Pandit Madan Mohan Malaviya Cancer Centre **(MPMMCC), Varanasi (350 - bed)** | September 21, 2017. | February 19, 2019. | **The Patient Registration Block started. Self sufficient to detect, diagnose & treat cancer patients.** | **Residential staff quarters & Dharamshala** to be ready by **end of 2021.** | **Included in the above Varanasi budget.** | **From the above Varanasi figure.** | **Added in the above Varanasi figure.** |
| Homi Bhabha Cancer Hospital & Research Centre **(HBCHRC), Muzaffarpur (100 - bed)** | February, 2017. | - | **Preventive Oncology** services started on a low scale from SKMCH. | 1. **Boundary wall work** given to **CPWD, Patna**<br>2. **Modular hospital building** through CSR to be **ready in early 2021.** | **19,815** | **400** | **266.93** |
| Dr Bhubaneswar Borooah Cancer Institute **(BBCI), Guwahati (120 - bed)** | June 7, 2017. | July 1, 2018. | **Self sufficient to detect, diagnose & treat cancer patients. Molecular Epidemiology** started along with **Flow Cytometry** & **Stereotactic Radiosurgery.** State-of-the-art **Mammography** machine installed. | 1. **Upgradation, renovation & augmentation** processes are ongoing<br>2. For **capital equipment** purchase. | **19,162**<br>**13,185** | **50**<br>**-** | **-**<br>**-** |
| The National Cancer Grid of India **(NCG)** | | 2012 | **Over 230 cancer centres across India.** | 1. **E-journal renewal**<br>2. **Implementation of the Health Records integration** at all centres. | **7,200** | **5,000** | **5,864.23** |

# Funding


DAE funding to TMC,
(April 2012 – March 2021)
≅ INR 4,500 crore.
(Figures in INR lakh)
Bihar
266.93
400
19815
BBCI, Ancil. Bldg.
19,162
BBCI, Assam
19,162
Varanasi
48,172.85
44,635
65,000
Punjab
27,672.43
28,137
66,374
Visakha-patnam
36,034.98
35,438
55,678
HWCCC (ACTREC)
2828.46
3026
3800
RRU (ACTREC)
2400
Adv.Cancer Research,...
17,390.23
17,824
24,960
Hadron Project...
36,066.91
36,460
42,500
National Cancer Grid
5960.02
5000
7200
Dharamshala+Staff...
5058.1
3849
8000
Aug.Health -...
921.85
3600
93,800
TMH, Diag. Facilties
22,718
23,142
29,755
Spent
Released
Sanctioned

# Highlights

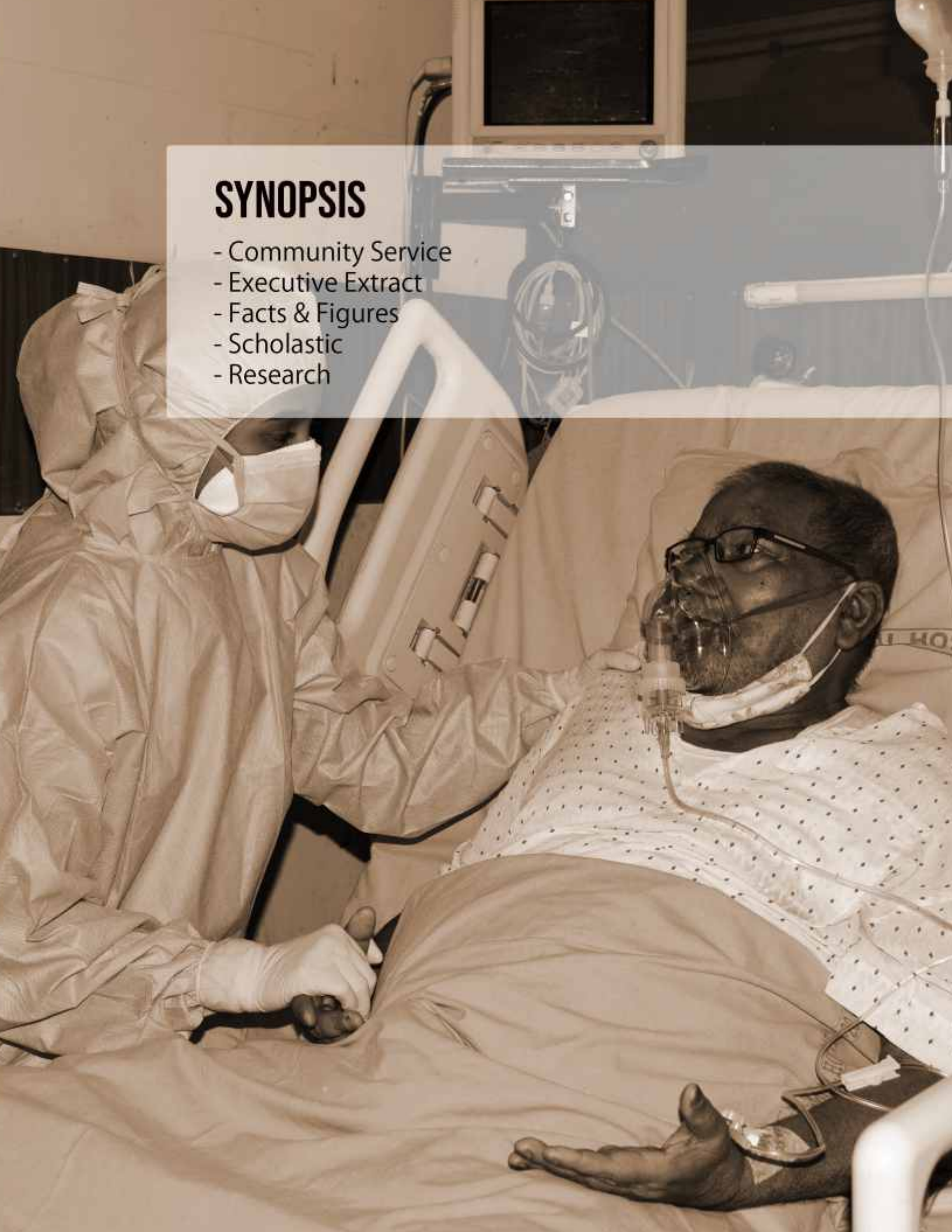
| Month | Events | Place |
|---|---|---|
| January | The first Molecular Epidemiology facility in Assam was inaugurated in Guwahati from January 1 | BBCI, Guwahati |
| | The temporary inpatients' facilities were started for Medical and Radiation oncology patients from January 1 | HBCHRC, Visakhapatnam |
| | The second Linear Accelerator at MPMMCC was commissioned from January 3 | MPMMCC, Varanasi |
| | The Patient Registration Centre (PRC) at MPMMCC was inaugurated by Dr. RA Badwe on January 3 | |
| | A first Fellowship program (Pediatric Oncology) in Assam was started. | BBCI |
| February | Blankets & chairs for patients were received through donations | HBCH, Sangrur |
| | A 100-bed Cancer hospital in Hulhumale, Maldives was proposed by Ministry of External Affairs, GOI | TMC-DAE-GOI |
| | The two cancer hospitals of TMC in Varanasi celebrated their Annual Day on February 22 & 23 | HBCH & MPMMCC, Varanasi |
| | A Memorandum of Understanding (MoU) was signed by Director TMC, Dr. RA Badwe with Divisional Commissioner of Varanasi, Mr Deepak Agrawal (on behalf of Kashi Vishwanath Temple Trust) to transfer the ownership of the land from the trust to TMC for establishing a Hospice & other similar facilities in Varanasi on February 23 | |
| | A Memorandum of Understanding (MoU) was signed by Director MPMMCC, Dr Satyajit Pradhan with Nagar Nigam Varanasi to organize cancer awareness & screening program for the Varanasi Nagar Nigam employees on February 23 | |
| | The Director TMC, Dr. RA Badwe inaugurated the St. Jude India Childcare Centre in the presence of founders of St. Jude India, Mrs. Shyama & Mr. Nihal Kaviratna in Varanasi on February 24 | |
| | The “Mahamana Sports & Recreation Club” was established for the staff of HBCH & MPMMCC on February 25. | |
| March | The two hospitals in Varanasi were affiliated by the Mahatma Gandhi Kashi Vidyapith, Varanasi for starting Paramedical courses on March 7. | |
| | | |
| **The World Health Organization (WHO) declared Covid-19 as a pandemic on March 11, 2020.** | | |
| | | |
| **Restrictions were enforced across all TMC cancer hospitals in view of Corona virus pandemic from March 16.** | | |

| Month | Events | Place |
|---|---|---|
| **Pan India Lockdown for Covid-19 from March 23.** | | |
| | | |
| **All TMC Cancer hospitals functioned with restrictions and staggered duties. The HBCH & MPMMCC were the only operational cancer hospitals in Purvanchal, Uttar Pradesh during the Covid Pandemic.** | | |
| | | |
| April | Dr Umesh Mahantshetty was appointed as Director of HBCHRC | HBCHRC, Visakhapatnam |
| | The first Covid patient was detected in TMH on April 11. Sixteen (16) staff members who came in contact with the patient were immediately put in quarantine for 14 days | TMH, Mumbai |
| | Tata Memorial Hospital was nominated to treat cancer patients with Covid by the Local, State & Central Government | |
| | The Director TMC, Dr. RA Badwe thanked all staff who worked & continued to work during the Covid pandemic on April 29, via WhatsApp. | TMC |
| May | Dr Rakesh Kapoor was appointed as Director of cancer hospitals in Punjab under TMC-DAE from May 1 | HBCH & HBCHRC, Punjab |
| | Masks, Sanitizers, Personal Protection Equipment (PPE) kits, chairs, blankets, etc. were received through donations | HBCH, Sangrur |
| | Dr Nitin Marathe was appointed as Assistant Medical Superintendent of HBCH | |
| | More than 60% staff joined work at TMH from May 4 | TMH |
| | The Cobalt Brachytherapy (Flexitron) was commissioned in Varanasi on May 7. | MPMMCC |
| June | The TMC Academic division resumed functioning from June 1. | TMC |
| | One Ultrasonography & one Digital X-ray machine were received as donations from Samsung Healthcare | HBCH, Sangrur |
| | The Nurses & Resident doctors' hostel was inaugurated on June 2 | HBCHRC, Visakhapatnam |
| | The Service Block for Stores & Engineering department was inaugurated on June 2 | |
| | The Registration Block for patients was commissioned from June 2 | |
| | The first magazine, "BBCI Edge-A Science Magazine" was released on June 23 by the Honorable Minister of State Health & Family Welfare department, Government of Assam, Shri Pijush Hazarika | BBCI |
| | The Annual Report of BBCI (year 2019), Guwahati was released by the Assam Chief Minister, Shri Sarbananda Sonowal, who also lauded the efforts of BBCI during the Covid pandemic. | |

| Month | Events | Place |
|---|---|---|
| July | The Unified Payment Interface payment system was introduced under Digital India Scheme | HBCH, Sangrur |
| | A Capacity Development Centre (CDC) in Oncology donated by Power Grid Corporation of India (PGCI), was inaugurated by the Honorable Governor of Assam, Professor Jagdish Mukhi on July 1 | BBCI |
| | The first patient in Varanasi was treated with Teletherapy on July 4 | MPMMCC |
| | The Institutional Ethics Committee (IEC) received approval for 2 years from the National Ethics Committee Registry for Biomedical & Health Research, Department of Health Research, MoHFW, GOI on July 7 | HBCH & MPMMCC |
| | The HBCH was designated as a Covid testing centre in Varanasi from July 20 | HBCH, Varanasi |
| | The first Molecular Virology Laboratory in Assam was inaugurated by the Honorable health Minister of Assam, Dr Himanta Biswa Sarma on July 22 | BBCI |
| | The WHO selected BBCI as its South-East Asia Regional Practice Network for Childhood Cancer Services (one of the four centres selected in India) | |
| | The state-of-the-art Digital Mammography machine was commissioned in Guwahati | |
| | The Flow Cytometry & Dental Prosthetic services were offered to patients | BBCI |
| | The first batch of students in TMH (and in India) appeared for the DM (Interventional Radiology) exams on July 27 | TMH |
| | The PET-CT scan services were commissioned from July 27 | HBCHRC, Visakhapatnam |
| | All General patients of TMH, Mumbai were initially screened for Covid infection at the St. Xavier's ground from July 30. | TMH |
| August | A dedicated ward for Hematolymphoid malignancies with facility for Stem Cell Transplant was inaugurated | BBCI |
| | On the national Sadbhavna Day, TMC launched emotional support helpline services for cancer patients in Mumbai & Pune. It was called Can-Helper, a toll free number, in association with Cipla Palliative Care & Training Centre and the municipal corporations of Mumbai & Pune on August 20 | TMC-TMH |
| | The first Brachytherapy Operation Theatre in Visakhapatnam was commissioned on August 24 | HBCHRC, Visakhapatnam |
| | Directors TMC & ACTREC, Drs. RA Badwe & Sudeep Gupta published a significant study in the JAMA Network Open “that reduced treatment cost to breast cancer patients” on August 26 | TMH & ACTREC (Navi Mumbai) |

| Month | Events | Place |
|---|---|---|
| August | All General patients of TMH, Mumbai were initially screened for Covid infection at the St. Xavier's ground from July 30. Full-fledged services at that ground were started from August 10 | TMH |
| | The Medical Intensive Care Unit (ICU) & High Dependency Unit (HDU) were inaugurated on August 31. | HBCHRC, Visakhapatnam |
| September | A Familial Cancer Clinic service was introduced for the first time in Assam | BBCI |
| | The Institutional Ethics Committees (IEC) for both hospitals in Varanasi were constituted | HBCH & MPMMCC |
| | Director TMC, Dr. RA Badwe was appointed as visiting professor to the National Cancer Centre, Graduate School of Cancer Science & Policy, Korea till 31.08.2022 | TMH-TMC |
| | Director, TMC Dr. RA Badwe was appointed on Board of Governors in the newly formed National Medical Commission of India from September 25. | |
| **September 24, 2020** | **Demise of Secretary DAE (23.10.2015-17.09.2018) & Director BARC (2012-2015), Dr Sekhar Basu (20.09.1952-24.09.2020) in Kolkata due to Covid infection.** | **DAE-TMC** |
| October | The First Stereotactic surgery was performed in North-East India | BBCI |
| | Director TMH, Dr. CS Pramesh was appointed on Board of Directors of the Union of International Cancer Control (UICC) | TMH |
| | The first Population Based Cancer Registry (PBCR) in Varanasi was released on October 16 | HBCH & MPMMCC |
| | The second surgical Operation theatre was inaugurated at the Visakhapatnam Port Trust hospital for HBCHRC on October 29. | HBCHRC, Visakhapatnam |
| November | The Holistic service facilities for cancer patients were started at MPMMCC | MPMMCC |
| | The introduction of first Electrical vehicle to transport patients between HBCH and MPMMCC | HBCH & MPMMCC |
| | The eighteen (18) bed St. Jude Child Care Centre was started at MPMMCC | MPMMCC |
| | Separate Out-patient and Day-care facilities were initiated from November 2 | HBCHRC, Visakhapatnam |
| | TMH started admitting Covid-19 patients in the Indian Cancer Society (ICS) premises from November 7 | TMH |
| | A 3T Magnetic Resonance Imaging (MRI) was commissioned on November 11 | HBCHRC, Visakhapatnam |

| Month | Events | Place |
|---|---|---|
| November | The Chief Minister of Uttar Pradesh, Shri Yogi Adityanath lauded the efforts of MPMMCC in providing cancer services to the local population | MPMMCC |
| | Process for constituting the Institutional Ethics Committee for Sangrur initiated. | HBCH, Sangrur |
| December | The Institutional Ethics Committee (IEC) in Visakhapatnam was established. | HBCHRC, Visakhapatnam |
| | A first SPECT-CT in Visakhapatnam was commissioned on December 8 | |
| | A MoU was signed between TMC & Vietnam National Cancer Hospital, Hanoi for a period of 2 years for collaborative exchange of students, research and cancer management on December 17 | TMC-TMH |
| | A MRI was commissioned at MPMMCC by head of department of Radiodiagnosis, Dr Suyash Kulkarni on December 18. | MPMMCC |



# SYNOPSIS

- Community Service
- Executive Extract
- Facts & Figures
- Scholastic
- Research

# Community Service

During the Covid pandemic, there was no suspension of any type of cancer service to the patients in any of the TMC hospitals across India even for a single day; and cancer patients with Covid infection were also treated. Even with reduced medical staff attendances, every patient was evaluated by the respective Disease Management Group (DMG).

All measures were in place to reduce the chance of infecting patients with corona virus, and the staff members donned face-masks & gloves, maintaining as safe a distance as possible while interacting with the patients. Steps were taken to prevent crowding in the hospitals. Outside the hospital premises, the hospital staff ensured that the patients maintained physical distance from each other and that they had their face-mask on. All patients were screened to determine their need to visit the hospital. Untreated or undiagnosed patients, those with appointments, and patients requiring urgent management only, were permitted inside the premises. The others were informed to take appointments prior to their visit to the hospital. Hand and pedal operated sanitizers were available at all hospital entrances for disinfection.

Services like short message service (sms) and mobile phone social media platforms like Whatsapp were utilized for providing appointments and relevant information to the patients. Teleconsultation practice was initiated to reduce crowding in the hospital premises. The TMC encouraged the public to make use of the online opinion services for cancer, the TMC-Navya that entered the fifth year of collaboration. This service had more than 300 cancer experts on their panel and offered their expert advice to over 50,000 patients across 68 countries.

Diagnostic images and all types of patient reports (tests, treatment, procedures, etc.) were available in electronic format that could be accessed from anywhere in the world. There were electronic kiosks in every hospital for patients to access their Electronic Medical Records. Automated Teller Machines (ATM) were sited at convenient patient locations for cash transactions. The staff from each of the TMC hospitals could view the electronic medical records and images of any patient treated in any of the TMC cancer hospital in the country. There was also seamless patient referrals that ensured that the patients did not have to re-register on being referred to / or opted for treatment at any other TMC cancer hospital across India.

During the period of complete lockdown, the management with the help of local authorities/bodies and the Non Government Organizations (NGOs) ensured that all patients & their accompanying relatives in the hospital were provided with daily meals. Within the hospital premises, the patients were guided & aided appropriately by the social workers and the Kevat students so as to prevent crowding in common areas and reduce their waiting period. To-and-fro transport was provided to patients who resided in hospital accommodations whenever required.

The patient corridors, the elevators and all rest rooms were frequently sanitized daily, and kept out of bounds for all staff & patients, whenever a suspected or Covid-infected patient had to be ferried through. The isolation wards for Covid infected patients were located far away from the usual in-patient wards. There was also a separate demarcated isolation area for those suspected to have Covid infection.

Any patient registered in any of the TMC cancer hospitals, could avail of the train reservation quota for them, and also board any train bogie marked "Handicap Compartment" in the country. Additionally, for consultation and treatment, the TMC registered patient could avail of the travel concessions by road, rail, or air from their permanent residence to any TMC cancer centre in the country. The concessions varied from free to 100% discount; some governmental mode of transport also provided varying concessions for an accompanying person.

The total patient registrations were just over 1 lakh for the year 2020. The New patient registrations were close to 70,000, of which, 79% were in the General & 21% in the Private category. More than 60% of the patients made cashless transactions to the tune of ~ INR 235 crore. For patients below the poverty line and for the needy, there were many local and central subsidized healthcare schemes. About 20% of the registered patients availed of the various government health beneficiary schemes across India (the majority being utilized by patients in Visakhapatnam, Guwahati, & Punjab).

Of all the TMC cancer hospitals in India, only those in Varanasi and Sangrur showed increase in the total number of new patient registration in 2020. The rest of the cancer hospitals saw a fall in new patient registrations ranging from 20% to 45%. All of the patient services also revealed reduced numbers, down to between 25% to 60% reduction, as compared to the previous year.

All hospitals affiliated to TMC charged the lowest amount for medicines, consumables, and professional fees and, the maximum concessions for life-saving drugs were 50% or lower than their Maximum Retail Price (MRP).

Local Cancer Registries were necessary to determine the cancer burden in the country and to know its incidence, types and mortality rates associated with it. The data from these registries helped in the formulation of the Cancer Control Programme in India. The first such registry was set up in Tata Memorial Hospital (TMH) in 1963. Later, it was extended to rural India, small town and cities. The TMC had established seventeen (17) Population-Based Cancer Registries (PBCR) in India. The latest PBCR was started for Varanasi, Uttar Pradesh and Muzaffarpur, Bihar (year 2020).

There were concerns regarding increased incidences of cancer in the general public, in areas having nuclear power plants. The Tata Memorial Centre (TMC) and the Department of Atomic Energy (DAE) of the Government of India (GOI) initiated maintaining such cancer registries, the "TMC-DAE Network of Cancer Registries" from year 2012 in the regions where there were Nuclear Power Plants. This was to determine if there were variations in the incidences of cancer in the Nuclear Power Plant locations as compared with areas without such power plants. These specific PBCRs were initiated at Tarapur in Maharashtra, Kakrapar in Gujarat, Karwar in Karnataka, Rawatbhata in Rajasthan, and Kalpakkam & Kundalam in Tamil Nadu.

For the general public who sought information, the Medical Superintendent of the hospital was the Public Information Officer (PIO) for all medical & dispensary issues and those related to patient services; the Chief Administrative Officer of the hospital for issues other than the aforementioned. The Public Relations Officer (PRO) was the Grievance Officer for all the patients' complaints filed through the Centralized Public Grievance Redress And Monitoring System (CPGRAMS) of the Department of Administrative Reforms & Public Grievances, Government of India.

The Director of the hospital was the Appellate Authority.

The Transparency Officer looked into all issues related to advertisements and Public information.

In the year 2020, one hundred eighty-two (182) Right to Information (RTI) were filed; of which, the replies of one hundred fifty-one (151) queries were found satisfactory by the complainants.

The remaining thirty-one (31) inquirers preferred information from the higher authorities. The Appellate Authority disposed of those thirty-one (31) cases. There were twenty-four (24) individual grievances filed through the Centralized Public Grievance Redress And Monitoring System (CPGRAMS) of the Department of Administrative Reforms & Public Grievances, Government of India. All twenty-four (24) issues were addressed to the satisfaction of the complainant.

# Executive Extract

The year 2020 was engulfed by the Corona virus disease pandemic (Covid-19) and the world struggled to come to grips with its onslaught and aftermath. The country saw over 150,000 Covid-related deaths including the demise of Dr Sekhar Basu (20.09.1952 – 24.09.2020), previous Chairman of Atomic Energy Commission & Secretary, Department of Atomic Energy (2015-2018) in Kolkata. He was awarded the Padma Shri (2014) in the Science & Engineering category.

All the cancer hospitals across India under Tata Memorial Centre (TMC) and the Department of Atomic Energy (DAE), Government of India (GOI) faced challenges of crippling circumstances brought about by the Covid-19 pandemic for the cancer patients. Patients with cancer and other chronic illnesses were hardly offered treatment during these times due to closure of many hospitals and the threat posed if they got infected by the virus.

Under a cloud of fear of the unknown and ignoring life-threatening risks, the pan India staff of hospitals under Tata Memorial Centre (TMC) & the Department of Atomic Energy (DAE) were at the forefront to treat cancer patients. Not a single cancer hospital under TMC was closed even for a single day during these trying times. This was despite the fact that many medical & non-medical staff were in quarantine due to Covid infection.

Cancer patients with Covid infection were also treated. Separate wards were created to isolate cancer patients having Covid infection from those not infected. Adequate protective measures were in place and the staff members in these wards were in their Personal Protective Equipment (PPE) kits. It was an example of altruist endurance by those staff members; for long hours at a stretch, they had to forgo food, water and wash-room visits, while sweating it out under their PPE kit.

At the hospital entrances, there were mandatory surface body temperature checks, wearing of face-masks and provision for hand sanitization prior to entry in the hospital premises. The anti-Covid guidelines were implemented and protective measures were in place within the premises for the staff and patients. With a great sense of duty and at personal risk, the medical, paramedical and non-medical staff attended to all cancer patients who visited these cancer centres. Diagnostic investigations and all forms of treatment, including various surgical interventions were performed on patients to manage their cancer.

The management with the help of local/city authorities and various Non-Government Organizations (NGOs) provided to-and-fro road transport for the staff and patients, implementing the policy of adequate physical distancing between the passengers. Daily meals were arranged for the patients, their relatives and for the staff residing in emergency hospital accommodations. Frequent sanitizations of all areas within the hospitals, especially of the common patient areas and the wash-rooms were carried out.

During the lock-down period, the patient load was markedly reduced. The reduction in hospital income was compounded by the additional expenditure for procuring and providing Covid safety items in large quantity like masks, gloves, PPE kits, sanitizers, etc.

Across all hospitals, more than 2000 cancer patients and over 1300 hospital staff were afflicted with Covid infection. There were about 160 Covid-related deaths amongst the cancer patients. Only one Covid infected staff member succumbed to the infection.

It was due to the single-mindedness and cohesive efforts on the part all grades of staff members and of the workers unions that care and treatment could be provided to the cancer patients in these pandemic times.

The TMC-DAE managed various cancer centres in Tiers I, II and III cities in India. The hospitals included; the Tata Memorial Hospital (TMH) in Mumbai, Maharashtra; the Advanced Centre for Treatment, Research & Education in Cancer (ACTREC) in Navi Mumbai, Maharashtra; the Centre for Cancer Epidemiology (CCE) in Navi Mumbai, Maharashtra; the Homi Bhabha Cancer Hospital & Research Centre (HBCHRC) in Visakhapatnam, Andhra Pradesh; the Homi Bhabha Cancer Hospital & Research Centre (HBCHRC) in Mullanpur, Punjab (to be operational soon); the Homi Bhabha Cancer Hospital (HBCH) in Sangrur, Punjab; the Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC) and the Homi Bhabha Cancer Hospital (HBCH) in Varanasi, Uttar Pradesh; the Dr Bhubaneswar Borooah Cancer Institute (BBCI) in Guwahati, Assam; and, the tenth cancer hospital under construction, the Homi Bhabha Cancer Hospital & Research Centre in the campus of the Sri Krishna Medical College & Hospital at Muzaffarpur in Bihar.

Under the XII Five Year Plan, the DAE Apex Committee for the development of Cancer Institutions in India (ACCII) was constituted for development of indigenous technologies & equipment for cancer prevention, early detection & its treatment. The Chairman of this committee was Dr. RA Badwe, Director of TMC. In order to provide better health facilities to the common man, cancer institutions in India were provided assistance for buying equipment and/or carrying out research projects. The committee rendered help in providing more than thirty (30) Bhabhatron (Telecobalt) and eleven (11) Imagin (Conventional simulator) to cancer centers across India. They also provided more than thirty-five (35) Telecobalt radioactive sources through the Board of Radiation & Isotope Technology (BRIT).

The DAE had under its wing almost 20% of the only cancer treatment centres in India; all being managed by Tata Memorial Centre.

## Employee Specifics

During the Covid pandemic, to-and-fro transport was provided for the staff from the hospital quarters and from many convenient locations across the city. The residential quarters provided by the hospital and the vehicles used were regularly sanitized. The on-duty staff was provided with daily meals.

Thirty percent (30%) of the staff were allocated duties in the beginning of the pandemic. They worked round-the-clock with staggered and/or rotational work-from-home weekly-duty basis, as per the needs of their respective departments. From June 2020 onwards, more than 60% staff were on daily routine duties; with full-strength from November onwards.

Pregnant staff members and those above 55 years of age with comorbidities were informed not to come to work. Lactating mothers were given work-from-home duties.

The magnanimous gesture on the part of the Government of India (GOI), the Department of Atomic Energy (DAE), and that of the hospital management must be acknowledged. Those hospital employees (all cadres) afflicted with Covid, were granted extra-ordinary leave; and, those who had to quarantine at home due to Covid in their residential family members, were instructed to work from home. Hence there were no financial or duty-leave loss to any employee who had to stay in isolation or quarantine because of Covid.

The TMC had staff strength of more than 3700 with a male to female ratio of 56:44. About 44% of them constituted the Reserved Caste category. Of these 44%, the majority (48%) belonged to the Other Backward Classes, 44.5% to the Scheduled Caste and 7.5% to the Scheduled Tribe. Additionally, thirty-two (32) differently challenged persons having special needs were employed: physical, twenty-two (22); and, visual & hearing, five (05) each.

New staff appointments in all TMC hospitals were under three-hundred (300) that included one-hundred four (104) from the Scheduled Caste, sixty (60) from the Other Backward Classes, and thirty (30) from the Scheduled Tribe.

Across India, two hundred thirty-nine (239) persons were promoted, thirty-eight (38) persons superannuated, forty (40) resigned, and nine (09) took voluntary retirement for various reasons.

Maternity Leave was granted to ninety-two (92) employees and one hundred (100) women availed of the Child Care Leave in 2020. Paternity Leave was availed of by fifty-two (52) men.

There were three committees in every hospital that addressed staff (all categories) grievances and for their protection, namely: the Internal Complaints Committee, the Grievance Redressal Committee, and the Radiation Safety Committee.

## Andhra Pradesh

The Homi Bhabha Cancer Hospital & Research Centre (HBCHRC) was started six years ago on 70-acre plot of land in Aganampudi, Visakhapatnam. Its Formation Director, Dr Raghunadharao Digumarti superannuated on March 31, 2020 and Dr Umesh Mahantshetty (Radiation Oncologist) was appointed as Director from April 2020.

The Main hospital building was expected to be commissioned by middle of year 2021.

The outpatient services of HBCHRC included Medical & Pediatric Oncology, Gynecological Oncology, Surgical Oncology, Head & Neck Oncology, Radiation Oncology, Catheter Clinic Services, Palliative Care, Diagnostics, Day Care services, cancer Prevention & Screening, and Physiotherapy.

A multi-disciplinary multi-modality Joint Tumor Board was started for better and comprehensive patient care. A Hospital Infection Control Committee was constituted to reduce the incidence of hospital acquired infections.

In the year 2020, the services for patients under the Yuvajana Smarika Rythu (YSR) Aarogyasri scheme of State of Andhra Pradesh was implemented. The signing of Memorandum of

Understanding (MoU) between HBCHRC and the Central Reserve Police Force (CPRF), and with the Naval and the Dockyard employees was underway.

The year of the onset of Covid pandemic saw a decline of annual total patient registration by 21% to below 7,000. However, the number of admissions and patients receiving radiotherapy increased due to augmentation of the facilities and the introduction of newer modalities in 2020.

Of the total registered patients, 56% made use of the Ayushman Bharat subsidized healthcare scheme.

A committee was constituted to supervise and implement Covid safety protocols, testing and other aspects, to contain the spread of Covid in the Hospital. There was regular Covid testing for the staff and patients. The Covid testing was performed after approval of the Indian Council of Medical Research (ICMR) and the State government authorities. A Fever Clinic was established to isolate those with signs and symptoms suggestive of Covid infection. The staff and patients were made aware of measures to reduce the risk of Covid infection and, safety kits were distributed to the patients.

Almost eighty staff members and more than seventy cancer patients were afflicted with Covid infection in the year 2020; all of them recovered.

Despite the Covid pandemic, the centre introduced newer facilities under appropriate safety measures. On the centre's formation day (June, 2), the doctors and nurses residential accommodations were inaugurated. The Microbiology department was fully equipped and functional in the year 2020. The Preventive Oncology and Radiodiagnostic services were relocated to the Radiotherapy (RT) Block. Brachytherapy treatment in a new Operation Theatre was commissioned. Inpatient admission facilities were started for those requiring radiation and/or chemotherapy. The first Magnetic Resonance Imaging (MRI), Positron Emission Tomography Computed Tomography (PET-CT), and a Single-Photon Emission Computerized Tomography (SPECT-CT) were commissioned in the latter half of year 2020.

The Dr Nandamuri Taraka Ramarao (NTR) University of Health Sciences AP granted four (04) seats for the masters' degree (MD) course in Radiation Oncology.

A certified Basic Life Support course for the nursing staff was undertaken in December 2020.

The Institutional Ethics Committee was constituted that was approved by the Central Drugs Standard Control Organization (CDSCO), Ministry of Health & Family Welfare, Directorate General of Health Services, Government of India.

## Assam

In the pandemic of corona virus disease, the year 2020 brought about a 29% reduction in the total number of patients registered at Dr. B. Borooah Cancer Institute (BBCI) as compared to the year 2019. Thirty-eight percent (38%) of those registered, availed of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme and the Atal Amrit Abhiyan (AAA) scheme of the Assam government. During the Covid-19 lock-down period, 5000 patients were provided teleconsultation.

The day-care patients for chemotherapy were reduced by 54% and the surgeries by 31%.

The Honorable Chief Minister of Assam, Shri Sarbananda Sonowal lauded the role of BBCI during this Covid pandemic.

More than 200 cancer patients and almost 100 staff members were afflicted with Covid infection and ten (10) cancer patients succumbed to the Covid infection.

At the BBCI, the first Molecular Virology Laboratory, developed by the National Health Mission, Assam was inaugurated by the Honorable Health Minister of Assam, Dr Himanta Biswa Sarma.

Stereotactic Radio Surgery was introduced for the first time in Northeastern India from the last quarter of year 2020. A State-of-the-Art Digital Mammography Machine and Flow Cytometry services were introduced as a first in Guwahati. Early in the year, a division of Molecular Epidemiology was also inaugurated.

Other new facilities initiated, included the Dental Prosthetic services, the Pain Clinic, a dedicated haematolymphoid malignancy ward with facility for haematopoetic stem cell transplant, and a Familial Cancer Clinic.

The Medical Council of India (MCI) recommended the starting of three (03) more superspecialty courses viz. DM in Onco-Pathology, MCh in Head & Neck Surgery and Gynecological Oncology. A Fellowship programme in Pediatric Oncology was also started early in 2020.

The World Health Organization (WHO), on the recommendation of the Ministry of Health & Family Welfare, Government of India, selected BBCI for its South-East Asia Regional Practice Network for Childhood Cancer Services; BBCI being one of the four Indian Cancer Centres selected for this service.

A Capacity Development Centre (CDC) in Oncology at BBCI, under the Corporate Social Responsibility (CSR) scheme of Power Grid Corporation of India Ltd was inaugurated by His Excellency, the Hon'ble Governor of Assam Prof. Jagdish Mukhi.

A comprehensive Pediatric & Hematolymphoid centre of 150-bed with Out-patient department, In-patient wards and Bone Marrow Transplant (BMT) unit, equipped with state-of-the art facilities was proposed. The expected time-frame for its completion was put as four years from start of construction.

## Bihar

The Homi Bhabha Cancer Hospital & Research Centre (HBCHRC) in Muzaffarpur would be a 100-bed hospital within the campus of Sri Krishna Medical College & Hospital (SKMCH).

The initial plan was to start the outpatient cancer services in the campus of SKMCH, working from prefabricated portable hospital structures made from aluminum. From the last quarter of year 2020, the Preventive Oncology services were operational from the premises of SKMCH.

The prefabricated hospital building was likely to be commissioned in the first quarter of the year 2021.

A Memorandum of Understanding (MoU) was signed between Tata Memorial Centre and the Bihar Government for the mode of implementation of their Mukhyamantri Chikitsa Sahayata Kosh (MCSK) scheme to the beneficiaries, as and when the HBCHRC was functional.

## Maharashtra

The State of Maharashtra had three cancer centres, of which, the Centre for Cancer Epidemiology (CCE) in Navi Mumbai did not treat patients. The other two centres that treated cancer patients were the Tata Memorial Hospital (TMH) in Mumbai and the Advanced Centre for Treatment, Research & Education in Cancer (ACTREC) in Navi Mumbai.

### Tata Memorial Hospital (TMH)

At the Tata Memorial Hospital (TMH), the new patients' registration fell by 46%. More than 6000 patients registered online. As most hospitals in Mumbai were almost shut down, the referrals for investigations increased by about 20%. Due to the lockdown, teleconsultation facilities were initiated and more than 900 patients availed of this facility.

The hospital saw more than 1500 cancer patients with Covid infection and there were 139 deaths related to the same. More than 1800 staff members contracted Covid infection and all recovered.

Of the approximately 17,000 new patients in the year 2020, 37% registered online (~6300). The Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) and the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) schemes were utilized by about 10% of the newly registered patients.

On the occasion of the National Sadbhavna Day (20th August), the Tata Memorial Hospital (TMH) launched emotional support helpline service for cancer patients in Mumbai & Pune. It was named Can-Helper, a toll free number, founded in association with Cipla Palliative Care & Training Centre and Municipal Corporation of Greater Mumbai and the Pune Municipal Corporation.

The residential doctors accommodation in Haffkine's campus was nearly completed by end of year 2020 and few doctors started residing there from August 11, 2020. All dining facilities were in place by the end of 2020. The Dharamshala was expected to be completed by the middle of year 2021.

From the data compiled till the year 2018, the commonest cancer sites in males were of the mouth, blood (leukemia) and the lungs; in females, it was of the breast, uterine cervix and the gall bladder.

### The Advanced Centre for Treatment, Research & Education in Cancer (ACTREC)

The new patient registration fell by 35% to below 12,000. Of these, only about 8% of the patients registered under the Mahatma Jyotiba Phule Jan Arogya Yojana (MJPJAY) and the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) schemes.

More than 2000 cancer patients and almost 500 staff members were infected with Covid. There were nine (09) Covid-related deaths among the cancer patients and one staff member succumbed to the infection.

In ACTREC, the programs of the Cancer Research Institute's (CRI) Principal Investigator led laboratories continued during 2020, with the on-going projects steadily progressing towards fulfilling their aims and goals. New projects were initiated in the area of basic and applied research on cancer.

The year 2020 saw the introduction of the Human Leukocyte Antigen laboratory services.

Several accolades were won by the scientists and students of the CRI during the year 2020.

The National Hadron Therapy unit, a first in a public sector in India, was likely to be commissioned by end 2021.

The Radiological Research Unit (RRU) complex will be the largest treatment and research centre for various Radioisotope-based cancer therapies in India, and, along with the Hematolymphoid Women & Children Cancer (HWCC) wing, were scheduled to be completed by the end of the year 2021.

The Pediatric Hematolymphoid Cancer Centre (Asha Niwas), constructed through Corporate Social Responsibility, was expected to be commissioned in the third quarter of 2021.

**The Centre for Cancer Epidemiology (CCE)**

The Centre for Cancer Epidemiology (CCE) was formed with the primary objective to estimate the numbers and types of cancer cases prevalent in various geographic locations within the country. The other objective was the attempt to determine the factors that led to the differences in the types and incidences of cancers in those geographic areas in India (as local/social customs varied from one State to another, and also within individual States). Through thorough analyses of the data so obtained, the epidemiology team sought to identify the role of life-style related cancer-risk factors and the role of genetics in cancer causation. To achieve all this, the management of CCE educated and trained individuals for cancer surveillance and population-based genetic studies.

The staff of CCE made use of technologically advanced tools to measure the cancer-risk factor exposures to individuals, and, to understand the genetic heterogeneity at population level and its interaction with various risk-factor exposures. This helped in the development and introduction of appropriate devices/methods for effective screening of common cancers.

The faculty expanded their registry network to understand cancer burden in areas without any local population cancer data, like in the cities of Varanasi and Muzaffarpur.

A publication by the faculty highlighted the importance of clinical breast examination in reducing mortality from breast cancer.

There was collaboration by the CCE with the BYL Nair Charitable and the BARC hospitals in Mumbai, to understand why some individuals with antibodies against corona virus in a specific population were more susceptible to develop severe disease (even fatal) than others.

In the year 2020, the CCE undertook projects on Artificial Intelligence for early detection and screening of common cancer, developed risk prediction models to identify individuals at high risk of cancer, and established many high-throughput assays to conduct assays on large number of samples. The ongoing epidemiological research would lead to evaluate and further confirm the cancer-risk factors specific to India in the development of cancer.

## Punjab

The growth of the Homi Bhabha Cancer Hospital (HBCH), Sangrur complex can be envisaged by the fact that its area was expanded from about 50,000 square feet (in 2015) to almost 90,000 sq. ft. in the year 2020. Besides the local patients, cancer patients from other parts of Punjab and the neighboring States of Haryana, Himachal Pradesh and Jammu & Kashmir also came to HBCH for cancer treatment.

The hospital campus erected temporary shelters and queue managers that adhered to the Covid pandemic guidelines.

The Homi Bhabha Cancer Hospital (HBCH) in Sangrur was one of the few hospitals that during the Covid pandemic had an increase in new patient registration by 3% over the previous year. This small increase in the number of patients was noteworthy in view of the dwindling numbers of registrations in many of the other cancer centres across India. There was also a 16% increase in the patient admissions during the year 2020.

More than thirty-five percent (35%) of the new patients made use of the Mukh Mantri Punjab Cancer Raahat Kosh (MMPCRK) and the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana schemes (AB-PMJAY).

Only Eleven (11) cancer patients and twelve (12) staff members were infected with Covid-19 virus; all of them recovered from the infection.

During the pandemic year, the hospital staff participated actively in show-casing the working of the hospital via audiovisual presentations of various social platforms like Facebook, YouTube, Twitter, etc.

The Unified Payment Interface (UPI) payment system was introduced under Digital India Scheme in HBCH, Sangrur. The Government e-Marketplace (GeM) portal was used for following the Government of India guidelines of Micro, Small & Medium Enterprises (MSME). E-gate passes were introduced for better control over material management.

To help the hospital in the pandemic crises, the HDFC Bank and the Indian Oil Corporation Limited provided substantial funds for procuring capital equipment. Samsung Healthcare donated an Ultrasound and a digital X-ray machine. Masks, gloves, sanitizers, personal protective equipment kits, etc. were donated by philanthropic organizations.

The HBCH, Sangrur was declared by the Baba Farid University of Health Sciences (BFUHS) as an oncology training centre. A Post Basic Diploma in Oncology nursing was started; a first in the State of Punjab and in the neighboring States.

Dr Rakesh Kapoor was appointed as the Director of the Homi Bhabha Cancer Hospital & Research Centre (HBCHRC), Mullanpur from May 2020.

The Homi Bhabha Cancer Hospital & Research Centre (HBCHRC) in Mullanpur was due to be commissioned in the third quarter of 2021.

## Uttar Pradesh

There were two cancer hospitals in the city of Varanasi, the Homi Bhabha Cancer Hospital (HBCH) that was operational from May 2018 and, the Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC) that was inaugurated on February 19, 2019.

The Homi Bhabha Cancer Hospital (HBCH) & the Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC) were the only hospitals in Purvanchal to treat cancer patients during the Covid pandemic. They were also the only TMC hospitals that had increased throughput across all services.

The new patient registrations increased by 17%, the patient admissions by 34%, the number of surgeries and chemotherapy cycles administered increased by 51% and 33% respectively and, the diagnostic services by over 50%.

More than 20% of the patients availed of the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme.

The Uttar Pradesh government designated the HBCH, Varanasi as one of the Covid Testing centres in Varanasi.

More than 250 cancer patients were infected with Covid virus and four (04) of them succumbed. Almost 150 staff members contracted Covid infection and there were no casualties.

The first Population Based Cancer Registry Report (PBCR) of Varanasi district was released on 16th October 2020.

The first Linear Accelerator, the second in Varanasi, was commissioned in MPMMCC. The Brachytherapy and Dental Prosthetic services were started at MPMMC & HBCH respectively. The Uttar Pradesh Chief Minister, Shri Yogi Adityanath lauded the radiotherapy services offered by MPMMCC.

The Director TMC, Dr. RA Badwe inaugurated the Patient Registration Counter and the St. Jude India Childcare Centre at MPMMCC in 2020. To facilitate continued treatment and its completion for the poor and needy paediatric cancer patients, a 18-bed St Jude Child Care Centre was set up in the MPMMCC campus.

To further benefit the patients, a patient facilitation centre was established at MPMMCC to offer them holistic assistance with quality cancer care.

A free electronic vehicle service was also introduced to ferry patients between HBCH and MPMMCC.

In the year 2020, among all the TMC cancer hospitals, Varanasi had the maximum number of newly appointed staff of 115 in a total of 239. The maximum number of staff members who resigned (25) were from Varanasi, out of a total number of 44 who retired from all the TMC hospitals across India.

The new officials appointed included; Dr Shashikant CU Patna, as Dean Academics for HBCH & MPMMCC; Dr Durgatosh Pandey as Deputy Director, MPMMCC; and, Dr Bal Krishna Mishra as the Deputy Director HBCH.

The Institutional Ethics Committee (IEC), Varanasi received approval for 2 years from the National Ethics Committee Registry for Biomedical& Health Research, Department of Health Research.

The HBCH & MPMMCC obtained affiliation from Mahatma Gandhi Kashi Vidyapith, Varanasi to start paramedical and Post-Graduation medical courses.

A Memorandum of Understanding (MoU) was signed by Director, Dr Satyajit Pradhan with Nagar Nigam Varanasi to organize cancer awareness & screening program for the Varanasi Nagar Nigam employees at Varanasi.

## Maldives

As and when required, help was provided to the Ministry of External Affairs for setting up of the 100-bed cancer hospital in Hulhumale, Maldives under the Line of Credit (LoC) extended to Maldives in the year 2019.

## National Cancer Grid

The National Cancer Grid (NCG) was the largest cancer network with more than 230 members.

Since the beginning of the Covid-19 pandemic, the NCG took the initiative to help all the member centres to provide periodic updates on various aspects of Covid-19, including the overview of SARS COV-2, judicious use of PPE, testing methods, treatment of Covid-19, sero-immunology, psycho-social issues, public health implications, the role of nurses, administrator's role, vaccines, research priorities, and patient's perspective.

The National Health Authority signed a Memorandum of Understanding (MoU) with the NCG to incorporate essential and optimal guidelines in the Pradhan Mantri Jan Ayogya Yajana (PMJAY) scheme for cancer packages to facilitate preauthorization and claims.

Enabling patients to become the owner of their health records was one of the objectives of the NCG for the National Digital Health Mission.

Supporting the conduct of multi-centric clinical research was also another mandate of the NCG. In the year 2020, the NCG funded four (04) such studies.

The NCG library launched a discovery tool – Akshara, that provided access to browse and search at article level for 17,000 indexed journals, videos, monographs, and presentations.

## Academia

More than 500 resident doctors worked in TMC hospitals across India; over 200 pursed their postgraduate doctorate courses in various subsets of oncology through the Homi Bhabha National Institute (HBNI), a deemed university established by DAE. In the year 2020, one hundred twenty-six (126) doctorate degrees were awarded by HBNI.

The HBNI graduation ceremony and the annual "Summer School in Oncology" between King's College, London (UK) and TMC for the year 2020 were cancelled due to the pandemic.

The first examination in India for DM Interventional Radiology was conducted by the HBNI in June 2020. The first batch doctors in India for DM Oncopathology (HBNI) will appear for their exams in 2021.

The one of its kind in India, a one-year Advanced Diploma in Patient Navigation called "KEVAT" entered its third year. The purpose of this course was to create a trained manpower to facilitate patient's journey right from entry to the Hospital to follow-up and getting back to normalcy; taking care in addition of emotional, economic and various other needs in a holistic manner. The Tata Memorial Centre (TMC), in collaboration with the Tata Institute of Social Sciences (TISS) and with support from the Tata Trusts introduced this course for the first time in India in 2018. The course addressed the need of structured patient support system for cancer care that formed a bridge between patients and the access to care.

The year 2020 saw an over 50% increase in the number of publications as compared to the previous year. Around 1100 scientific articles published; over 700 in International and more than 350 in National reputed journals. Seventeen (17) books were written by the staff members, in addition to their thirty-four (34) book-chapter contributions.

As against the 200-odd conferences conducted physically last year, the year 2020 saw only about 100 such meetings. There were conferences that were cancelled and many held virtually. The last major conference to be held in the year 2020 was the XVIII Annual Evidence Based Medicine (EBM) conference of TMC from 27th February - 1st March 2020. The three modules of this conference included: Contemporary Management in Neuro-Oncology; Current Concepts and Controversies in Palliative Medicine; and, Urological Cancers: A Decade of Transformation.

**Pre-conference Workshop, Master class in Neurosurgical Oncology:**

The workshop was tutored by various international faculties including Dr Micheal Sabel in mastering various intra-operative techniques used during glioma surgery. These included modules in Sub-pial resection, use of Cavitron Ultrasonic Surgical Aspirator (CUSA), intra-operative ultra-sonography, use of navigation, Diffusion Tensor-Imaged (DTI) planning and

neuromonitoring techniques. These modules included didactic lecture, case discussions and hands-on training.

**Pre EBM CME on 'Research Methods in Palliative Medicine':**

The theory aspects of concept development, quantitative & qualitative research, writing a protocol, and research in low resource settings were discussed. The lectures were taken by eminent international faculty – Dr Camilla Zimmermann (Canada) and Dr Sriram Yennu (USA). The national faculty included: Dr Reena George (Vellore), Dr Shrikant Atreya (Kolkata), Dr Raghavendra Rao (New Delhi), Dr Priya Ranganathan (Mumbai), and Mr. KV Ganpathy (Mumbai). Also, small groups were formed wherein participants had two facilitators to advise them on how to translate a concept into protocol and other issues that they had on writing their own research concepts.

**Contemporary Management in Neuro-Oncology:**

The deliberations were centered on the management of Adult Diffuse Adult Gliomas including diagnostics and therapy, and included several didactic lecture by various renowned faculty followed by case discussion in form of tumor board meetings.

The discussion was focused on new advances in gliomas including emerging focal therapies and radiomics followed by management of sellar/suprasellar tumors, meningiomas and one session on brain metastasis.

Lastly, management of common paediatric brain tumors was debated upon and new ideas for upcoming research were suggested.

**Urological Cancers, A Decade of Transformation:**

The plenary talk was given by Prof. Nicholas James, the Chief Investigator of the STAMPEDE (Systemic Therapy in Advancing or Metastatic Prostate Cancer: Evaluation of Drug Efficacy) trial, a ground-breaking clinical trial assessing novel treatment approaches for men affected with advanced prostate cancer.

**Current Concepts and Controversies in Palliative Medicine:**

The topics included, Anorexia Cachexia Syndrome (ACS), Cancer related fatigue (CRF), Early Palliative Care (EPC), and Chronic Breathlessness Syndrome (CBS). The International Faculty included Dr Camilla Zimmermann (Canada), Dr Sriram Yennu (USA), Dr Miriam Johnson (UK), Dr Frank Ferris (USA) and Dr Arnie Purushotham (UK). The National Faculty included Padmashri Dr. MR Rajagopal (Kerala), Dr Reena George (Vellore), Dr Prabha Chandra (Bengaluru), Dr Raghavendra Rao (New Delhi), Dr Geeta Joshi (Gujrat), Dr Gayatri Palat (Hyderabad), Dr Nandini Vallath (Mumbai), Dr Kumar Prabhash (Mumbai) and Dr Muckaden (Mumbai).

**Three (03) books were published during the EBM:**

1. Evidence Based Management of Cancer in India: Guidelines for Contemporary Management in Neuro Oncology (Part A)

2. Evidence Based Management of Cancers in India: Guidelines for Urological Cancers: A Decade of Transformation (Part B)

3. Evidence Based Management of Cancers in India: Guidelines for Current Concepts and Controversies in Palliative Medicine (Part C).

The EBM 2020 adopted the Go Green initiative, using eco-friendly merchandise and reducing the use of paper and disposable plastic whenever possible.

The **Hospital Day Oration** was given by Dr Roger Stupp on "Management of glioma: Translating evidence into meaningful treatment and care."

Over 170 medical observers from India and abroad visited the cancer hospitals under TMC.

The **Foreign students training** programs included:

| Training | 2020 |
|---|---|
| TMC Merck Fellows | **10** |
| Indo African Foreign Summit Fellows | **00** |
| Myanmar Candidates | **12** |

Over 170 medical observers from India and abroad visited the cancer hospitals under TMC.

A Memorandum of Understanding (MoU) would be signed between Tata Memorial Centre (TMC) and the Vietnam National Cancer Hospital (VNCH) in Hanoi for student exchange programs, research & educations collaborations, and sharing of cancer management intelligence in the first week of January 2021.

## Research

The Institutional Ethics Committees (IECs) that was recognized nationally and internationally ensured the highest scientific and ethical standards of research at Tata Memorial Centre. There were five IECs; two in TMH, and one each at ACTREC, Varanasi, and Visakhapatnam. The sixth IEC was due to be constituted for Sangrur in the year 2021.

The majority of laboratory, animal and clinical researches were conducted at ACTREC. In the year 2020, there were six hundred thirty-six (636) research projects, of which, ninety-two (92) were dissertations by students of HBNI.

The TMC provided financial support for research studies through the grants available from DAE and more than 50% of the projects were funded.

### The International Peer Review

The International Peer Reviews became part of evaluation of TMC's aim for excellence, and to maintain the highest standards for cancer management in the world. The first such review was held in the year 2011 and the second in 2016. The third International Peer Review would be conducted in two parts; the first part in the first half of year 2021 and the next, in the second quarter of 2022.

## New avenues

- A novel drug regime with substantial cost reduction to breast cancer patients was formulated and published by Directors Dr. RA Badwe (TMC) & Dr Sudeep Gupta (ACTREC).
- Introduction of Human Leukocyte Antigen laboratory services at ACTREC.

## Recognitions

- Dr. RA Badwe was appointed on the Board of Governor of the newly formed National Medical Commission (NMC) Act – 2019.
- Dr. RA Badwe was appointed as a visiting professor to the National Cancer Centre, Graduate School of Cancer Science & Policy in Korea.
- Dr. CS Pramesh was appointed on Board of Directors of the Union for International Cancer Control (UICC).
- The WHO selected the Dr. B. Booroah Cancer Institute (BBCI), Guwahati as its South-East Asia Regional Practice Network for Childhood Cancer Services (one of the four centres selected in India).
- The Chief Minister of Uttar Pradesh, Shri Yogi Adityanath lauded the efforts of MPMMCC in providing cancer services to the local population.

### Awards

- Dr Arvind Ingle (ACTREC) received the Outstanding Contribution to Animal Science Award – 2020 conferred by the Dr. B. Vasanthraj David Foundation, Chennai, for meritorious contribution to Laboratory Animal Science and higher education.
- Dr Pradip Chaudhary (ACTREC) was awarded the Brig. SK Mazumdar Oration of the Society of Nuclear Medicine in December 2020.
- Dr Sharada Sawant (ACTREC) was awarded the first prize in Microscopy Techniques under the Metallography Contest at the 12th Asia Pacific Microscopy conference in February 2020.
- Ms Tarang Gaur, a senior research fellow (ACTREC), was selected for the Newton-Bhabha PhD placement fellowship (jointly funded by Department of Biotechnology (DBT), India and the British Council, UK) at UK's Queen's University Belfast.

## Patents

Three (03) patents were filed from ACTREC in the year 2020 that included:

- Antibodies against Lipocalin-2 and its Uses
- Nanoparticles incorporated Self-Gelling Composition as Drug Delivery System
- Novel peptides targeted to cisplatin resistant ovarian cancer cells.

### Financial burden, pandemic-related

The months between April and July 2020 were the hardest hit financially when the revenues from

direct patient income, those aided by various trusts, and through government subsidies, fell by about 60%. There was also reduction (~20%) in the grant from the Department of Atomic Energy.

In normal circumstance, a substantial part of the salary expenses were met from the hospital receipts. However, due to the Covid impact, the proportionate amount could not be met from the Hospital receipts, resulting in the increase in budgetary requirement. The variation was also due to additional expenditure towards Covid-related expenditure.

Plan for Creation of Assets: The Budget Estimate (BE) was INR 436.25 crore, the Revised Estimate (RE) was INR 351 crore; a 20% decrease. The Plan Grant received was INR 334.55 crore.

The budgetary sanction for Creation of Assets got reduced by 20% that slowed down progress of completion of major projects undertaken by TMC.

The Non Plan BE was INR 413 crore; the RE was INR 500 crore, a 21.06% increase. The Non Plan Grant received was INR 554.08 crore.

**Budget**

The questions regarding the budget raised by the Parliamentary Standing Committee on Science & Technology Environment & Forest in February 2021 were answered to their satisfaction.

The Financial Outlay Revised Estimate (RE) of all projects for year 2020-2021 was INR 334.55 crore. The proposed Budget Estimate (BE) for year 2021-2022 was INR 750.50 crore and the DAE sanctioned the BE of INR 409 crore.

The proposed Revised Estimate (RE) for year 2021-2022 was INR 845.80 crore.

The proposed Budget Estimate (BE) for the year 2022-2023 was INR 891.35 crore.

**Future Plans**

- A 150-bed comprehensive Pediatric & Hematolymphoid Cancer Centre within the campus of Dr. B. Borooah Cancer Institute, Guwahati
- Feasible preventive intervention to control the higher incidence of cancer of the Gall bladder in the northern and northeastern part of India
- Expansion of the Advanced Centre for Treatment, Research & Education in Cancer at Navi Mumbai to cater to a larger population and those with particular cancer types
- Refurbishing the Main hospital building of Tata Memorial Hospital, Mumbai
- A new Centre for New Biology and Emerging Medicine. It was proposed to set-up the world's first cancer research centre that combined cutting edge modern biology with Ayurvedic traditions at TMC, Mumbai.

## Facts & Figures

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| **Covid-19 Data** | | | | | | | |
| | | | | | | | |
| **Number of tests performed for Covid-19** | **21,266** | **10,399** | **259** | **1054** | **2837** | **5800** | **41,615** |
| **Number of Covid-19 Positive cases** | **4237** | **2842** | **154** | **44** | **400** | **399** | **8076** |
| | | | | | | | |
| **Number of cancer patients with Covid infection** | **1089** | **2280** | **75** | **11** | **256** | **299** | **4010** |
| **Number of Staff with Covid infection** | **1860** | **562** | **79** | **44** | **144** | **100** | **2789** |
| **Number of Covid infected patients without cancer** | **89** | **11** | **SNA** | | | | **100** |
| | | | | | | | |
| **Cancer Data** | | | | | | | |
| | | | | | | | |
| **Patient Registrations** | | | | | | | |
| General New Patient Registrations (1) | **16,897** | **9022** | **3466** | **4029** | **12,241** | **8288** | **53,943** |
| Private New Patient Registrations (2) | **6950** | **2864** | **547** | **64** | **2197** | **1333** | **13,955** |
| | | | | | | | |
| **(3) = 1+2: Total New Patients** | **23,847** | **11,886** | **4013** | **4093** | **14,438** | **9621** | **67,898** |
| Total New Patients (2019) | 44,063 | 18,293 | 5050 | 3964 | 12,292 | 12,995 | 96,657 |
| | | | | | | | |
| Patient Referrals for Investigations (4) | **22,324** | **6392** | **534** | **1196** | **333** | **739** | **31,518** |
| Patients Referred for Consultation (Expert Opinion) (5) | **3946** | **187** | **69** | **29** | **00** | **00** | **4231** |
| | | | | | | | |
| **Total Referral Patients (4+5)** | **26,270** | **6579** | **603** | **1225** | **333** | **739** | **35,749** |
| Total Referral patients (2019) | 21,885 | 1246 | 1212 | 1284 | 336 | 296 | 26,259 |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| Preventive Oncology Patients (6) | **2315** | **SNA** | **878** | **130** | **747** | **118** | **4188** |
| Preventive Oncology Patients (2019) | 5630 | | 636 | 266 | 1726 | 1397 | 9655 |
| | | | | | | | |
| **(**3+4+5+6**) = Total Patient Registrations** | **52,432** | **18,465** | **5494** | **5448** | **15,518** | **10,478** | **1,07,835** |
| Total in Previous Year (2019) | 71,578 | 19,539 | 8037 | 5514 | 14,079 | 14,688 | 1,33,435 |
| | | | | | | | |
| **Teleconsultations** | **944** | **2200** | **00** | **00** | **00** | **5000** | **8144** |
| | | | | | | | |
| **Inpatient Services** | | | | | | | |
| Bed Strength | **640** | **120** | **63** | **51** | **537** | **260** | **1671** |
| **Number of Admissions** | **21,941** | **3931** | **1803** | **2974** | **8230** | **5429** | **44,308** |
| Number of Admissions (2019) | 28,726 | 5614 | 852 | 2568 | 6146 | 8704 | 52,610 |
| | | | | | | | |
| Average Length of Stay (Days) | **5.94** | **5.74** | **5.48** | **3.8** | **09** | **10.67** | **6.77** |
| Bed Occupancy (Percentage) | **79** | **64.48** | **54.26** | **60.9** | **79.52** | **37.3** | **62.57** |
| | | | | | | | |
| **Surgical Oncology** | | | | | | | |
| Major Operative Procedures | **6002** | **1973** | **701** | **831** | **2160** | **1289** | **12,956** |
| Minor Operative Procedures | **23,080** | **974** | **202** | **870** | **4003** | **972** | **30,101** |
| Robotic Surgeries performed | **136** | **SNA** | | | | | **136** |
| | | | | | | | |
| **Total Surgeries performed** | **29,218** | **2947** | **903** | **1701** | **6163** | **2261** | **43,193** |
| Total Surgeries performed (2019) | 52,157 | 4069 | 806 | 1818 | 4098 | 3295 | 66,243 |
| | | | | | | | |
| **Medical Oncology** | | | | | | | |
| Day Care: General patients | **80,294** | **13,759** | **7131** | **11,707** | **36,648** | **18,237** | **1,67,776** |
| Day Care: Private patients | **23,326** | **2574** | **172** | **SNA** | **6945** | **2596** | **35,613** |
| | | | | | | | |
| **Total Day-care patients** | **1,03,620** | **16,333** | **7303** | **11,707** | **43,593** | **20,833** | **2,03,389** |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| Total Day-care patients (2019) | 1,72,725 | 26,411 | 6776 | 12,021 | 32,743 | 45,281 | 2,95,957 |
| | | | | | | | |
| Bone Marrow Transplants performed | **SNA** | **37** | **SNA** | **SNA** | **00** | **SNA** | **37** |
| Total Bone Transplant patients (2019) | | 58 | | | 01 | | 59 |
| | | | | | | | |
| **Digestive Diseases & Clinical Nutrition** | | | | | | | |
| Endoscopies | **3502** | **04** | **SNA** | **SNA** | **SNA** | **5032** | **8538** |
| Nutrition Clinic | **21,113** | **SNA** | | | **7498** | **4280** | **32,891** |
| | | | | | | | |
| **Anesthesiology, Critical Care & Pain** | | | | | | | |
| Number of (ICU) Admissions | **1610** | **2133** | **780** | **1679** | **432** | **1163** | **7797** |
| Patients in Recovery Ward | **8071** | **1865** | **SNA** | **SNA** | **1404** | **DNA** | **11,340** |
| Pain Clinic | **8693** | **295** | **SNA** | **176** | **203** | **103** | **9470** |
| | | | | | | | |
| **Radiation Oncology** | | | | | | | |
| External Beam Therapy | **6083** | **911** | **919** | **1065** | **2094** | **2690** | **13,762** |
| Brachytherapy | **1951** | **68** | **48** | **445** | **71** | **40** | **2623** |
| | | | | | | | |
| **Total Radiotherapy patients** | **8034** | **979** | **967** | **1510** | **2165** | **2730** | **16,385** |
| Total Radiotherapy patients (2019) | 11,970 | 1511 | 201 | 1654 | 1203 | 3609 | 20,148 |
| | | | | | | | |
| Treatment Planning / Beam Modification | **13,578** | **917** | **919** | **1065** | **27,054** | **831** | **44,364** |
| | | | | | | | |
| **Imaging Services** | | | | | | | |
| Conventional Radiography | **45,953** | **2724** | **2259** | **954** | **7265** | **7901** | **67,056** |
| Ultrasound / Color Doppler | **33,444** | **1688** | **3052** | **1928** | **3949** | **4710** | **48,771** |
| Mammography | **7531** | **1225** | **1380** | **1139** | **1477** | **295** | **13,047** |
| C.T. Scan (Diagnostic) | **22,228** | **4349** | **2652** | **4706** | **12,384** | **7197** | **53,516** |
| C.T. Scan (for Radiotherapy Planning) | **NA** | **935** | **1328** | **1313** | **DNA** | **698** | **4274** |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| M.R.I Scan | **6912** | **2349** | **83** | **1013** | **2728** | **1234** | **14,319** |
| Interventional Radiology | **4428** | **697** | **SNA** | **1488** | **SNA** | **SNA** | **6613** |
| | | | | | | | |
| **Total Radiodiagnosis patients** | **1,20,496** | **13,967** | **10,754** | **12,541** | **27,803** | **22,035** | **2,07,596** |
| Total Radiodiagnosis patients (2019) | 2,09,145 | 20,213 | 8912 | 12,355 | 16,639 | 34,632 | 3,01,896 |
| | | | | | | | |
| **Nuclear Medicine** | | | | | | | |
| PET-CT Scan | **11,751** | **1991** | **401** | **SNA** | **3025** | **SNA** | **17,168** |
| SPECT-CT Scan | **3431** | **SNA** | **05** | | **SNA** | | **3436** |
| SPECT Scan | **SNA** | | **SNA** | | | **702** | **702** |
| High Dose Therapy | | | | | | **79** | **79** |
| | | | | | | | |
| **Total Nuclear Medicine patients** | **15,182** | **1991** | **406** | **SNA** | **3025** | **781** | **21,385** |
| Total Nuclear Medicine patients (2019) | 22,243 | 2882 | 00 | | 2415 | 1050 | 28,590 |
| | | | | | | | |
| **General Medicine** | | | | | | | |
| Electrocardiogra-phy (ECG) | **21,932** | **3432** | **1025** | **SNA** | **8956** | **4847** | **40,192** |
| Echo Cardiography | **7429** | **1767** | **SNA** | | | | **9196** |
| Pulmonary Function Test (PFT) | **1662** | **SNA** | | | | | **1662** |
| | | | | | | | |
| **Laboratory Diagnostics** | | | | | | | |
| Pathology - Histopathology + IHC + Frozen Section | **1,12,502** | **10,910** | **7290** | **8102** | **14,226** | **6045** | **1,59,075** |
| Biochemistry | **24,31,917** | **50,812** | **14,834** | **1,22,372** | **95,709** | **4,10,050** | **31,25,694** |
| Cytopathology | **10,886** | **SNA** | **1530** | **2441** | **3414** | **2377** | **20,648** |
| Molecular Pathology | **28,495** | **SNA** | **SNA** | **SNA** | **SNA** | **17,000** | **45,495** |
| Microbiology | **1,28,410** | **14,827** | **2633** | **16,141** | **50,477** | **12,068** | **2,08,415** |
| Bacteriology | **29,793** | **6951** | **110** | **DNA** | **6179** | **1031** | **44,064** |
| Mycobacteriology | **4386** | **66** | **12** | | **132** | **51** | **4647** |
| Mycology | **3133** | **129** | **01** | | **23** | **10** | **3296** |
| Serology | **82,003** | **5914** | **2006** | | **40,155** | **10,638** | **1,40,716** |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| Virology | **DNA** | **DNA** | **91** | | **DNA** | **DNA** | **91** |
| Clinical Microbiology | **5477** | **1767** | **413** | | **1695** | **338** | **9690** |
| Molecular Microbiology | **3618** | **SNA** | **SNA** | | **2293** | **SNA** | **5911** |
| Hematopathology | **3,57,457** | **44,946** | **14,169** | **30,277** | **94,844** | **41,127** | **5,82,820** |
| Cytogenetics | **5973** | **18,141** | **SNA** | **SNA** | **518** | **46** | **24,678** |
| | | | | | | | |
| **Total Laboratory investigations** | **30,75,640** | **1,39,636** | **40,456** | **1,79,333** | **2,59,188** | **4,88,713** | **41,66,825** |
| Total Laboratory investigations (2019) | 53,08,770 | 1,90,544 | 34,023 | 1,63,109 | 1,63,320 | 4,28,481 | 62,88,247 |
| | | | | | | | |
| **Flow Cytometry & Molecular Hematopathology** | | | | | | | |
| Bone Marrow Aspiration Morphology | **SNA** | **4519** | **82** | **SNA** | **SNA** | **310** | **4911** |
| Flow Cytometric Immunophenotyping | | **5325** | **SNA** | | | **25** | **5350** |
| Molecular Hematopathology | | **4787** | | | | **17** | **4804** |
| **Human Leukocyte Antigen (HLA) Laboratory** | | | | | | | |
| HLA Typing | **NA** | **4061** | **SNA** | **SNA** | **77** | **DNA** | **4138** |
| Antibody Screening | | **117** | | | **DNA** | **73** | **190** |
| | | | | | | | |
| **Total of all Laboratory investigations** | **30,75,640** | **1,58,445** | **40,538** | **1,79,333** | **2,59,265** | **4,89,138** | **41,86,218** |
| Total of all Laboratory investigations (2019) | 53,08,770 | 2,16,027 | 34,113 | 1,63,109 | 1,63,397 | 4,28,870 | 63,14,286 |
| | | | | | | | |
| **Transfusion Medicine** | | | | | | | |
| Blood Components Prepared [Whole Blood + Packed Red Cells + Platelets (Random Donor Platelet) + Fresh Frozen Plasma + Cryoprecipitate + Factor VIII Deficient Plasma]. | **39,589** | **4371** | **SNA** | **SNA** | **16,434** | **8700** | **69,094** |
| Single Donor Platelets (SDP) prepared | **4195** | **967** | | | **1312** | **SNA** | **6474** |
| Specialized Procedures (Irradiation of blood | **26,468** | **4423** | | | **09** | | **30,900** |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| Products + Granulocyte Harvest + Therapeutic Leukapheresis + Therapeutic Plasma Exchange). | | | | | | | |
| Laboratory Investigations (Blood Grouping + Cross matching + Antibody Detection). | **68,022** | **13,617** | **1412** | | **57,161** | **20,702** | **1,60,914** |
| Blood Units Collected | **13,441** | **2870** | **SNA** | | **5725** | **4997** | **27,033** |
| Platelet Pheresis | **3743** | **967** | | | **1312** | **SNA** | **6022** |
| | | | | | | | |
| **Other Clinical Services** | | | | | | | |
| Central Venous Access Device (CVAD) Clinic | **1324** | **1820** | **75** | **66** | **9620** | **123** | **13,028** |
| Stoma Clinic | **6547** | **919** | **SNA** | **SNA** | **2479** | **75** | **10,020** |
| Occupational Therapy | **10,502** | **SNA** | | | **1070** | **SNA** | **11,572** |
| Physiotherapy | **15,447** | **6498** | **1669** | **3425** | **7299** | **4113** | **38,451** |
| Speech Therapy | **10,129** | **SNA** | **SNA** | **SNA** | **SNA** | **1020** | **11,149** |
| Psychiatry and Clinical Psychology | **2198** | | | | | **SNA** | **2198** |
| **Dental Services** | | | | | | | |
| General Dentistry | **8985** | **2406** | **227** | **SNA** | **1112** | **1393** | **14,123** |
| Prosthetics Services | **857** | **100** | **SNA** | | **40** | **03** | **1000** |
| **Tissue Bank** | | | | | | | |
| Allografts Produced | **6463** | **SNA** | | | | | **6463** |
| Total of Allografts produced (2019) | 10,560 | | | | | | 10,560 |
| **Palliative Medicine** | | | | | | | |
| Number of Patients | **17,763** | **NA** | **6356** | **SNA** | **8470** | **15,986** | **48,575** |
| Home Care Visits | **3014** | | **132** | | **23** | **442** | **3611** |
| **Medical Social Service** | | | | | | | |
| Number of Beneficiaries for Financial support | **6401** | **264** | **108** | **1977** | **4768** | **5146** | **18,664** |
| Number of Beneficiaries for Accommodation | **2616** | **1000** | **00** | **473** | **773** | **7941** | **12,803** |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| **Total Beneficiaries** | **9017** | **1264** | **108** | **2450** | **5541** | **13,087** | **31,467** |
| Total Beneficiaries (2019) | 13,077 | 3270 | 230 | 2176 | 3225 | 23,866 | 45,844 |
| | | | | | | | |
| **Education** | | | | | | | |
| Total Post-graduate (PG) Students admissions | **211** | **NA** | **NA** | | | **16** | **227** |
| Numbers, obtained Degree in the year | **181** | | | | | **16** | **200** |
| MD | **79** | | | | | **02** | **81** |
| DM | **24** | | | | | **02** | **26** |
| MCh | **22** | | | | | **03** | **25** |
| PhD | **01** | **01** | | | | **01** | **03** |
| Others | **56** | **00** | | | | **09** | **65** |
| Residents & Others | **382** | **52** | **24** | **18** | **47** | **10** | **533** |
| Fellows | **43** | **07** | **01** | **05** | **01** | **04** | **61** |
| Kevat, Patient Navigation Course | **26** | **NA** | **NA** | **01** | **NA** | **01** | **28** |
| Paramedical Students | **23** | **00** | **01** | **52** | | **40** | **116** |
| Medical Physicists Trainees | **08** | **02** | **03** | **02** | | **04** | **19** |
| Medical Laboratory Trainees | **19** | **01** | **02** | **01** | **10** | **08** | **41** |
| Medical Observers | **152** | **16** | **00** | **00** | **03** | **00** | **171** |
| | | | | | | | |
| **Research Profile** | | | | | | | |
| Extramural Projects | **11** | **43** | **00** | **01** | **05** | **16** | **76** |
| Pharmaceutical Company Sponsored | **16** | **02** | **00** | **00** | **00** | **01** | **19** |
| Intramural + Extramural Projects | **31** | **91** | **00** | **04** | **31** | **02** | **159** |
| Institutional Intramural Projects | **43** | **02** | **04** | **06** | **32** | **00** | **87** |
| Nil Funding | **95** | **44** | **04** | **00** | **00** | **60** | **203** |
| Postgraduate Student Thesis (Dissertation) | **40** | **42** | **01** | **02** | **00** | **07** | **92** |
| | | | | | | | |
| **Total Projects** | **236** | **224** | **09** | **13** | **68** | **86** | **636** |
| Total Projects (2019) | 267 | 443 | 07 | 01 | 00 | 24 | 742 |

| Cancer Centres/Hospitals | TMH | ACTREC | Vizag | Sangrur | Varanasi | BBCI | Total |
|---|---|---|---|---|---|---|---|
| **Publications** | | | | | | | |
| International | **448** | **191** | **31** | **08** | **12** | **20** | **710** |
| National | **294** | **28** | **08** | **10** | **09** | **06** | **355** |
| Book | **11** | **00** | **03** | **00** | **00** | **03** | **17** |
| Book Chapters | **33** | **01** | **00** | **00** | **00** | **00** | **34** |
| | | | | | | | |
| **Total Publications** | **786** | **220** | **42** | **18** | **21** | **29** | **1116** |
| Total Publications (2019) | 519 | 155 | 04 | 00 | 09 | 43 | 730 |
| | | | | | | | |
| **Conferences, Workshops, Seminars, etc.** | **19** | **24** | **36** | **12** | **02** | **09** | **102** |
| | | | | | | | |
| **Value of Medicines Dispensed (INR lakh)** | **31,189** | **2887.83** | **833.52** | **1304** | **4611.1** | **1512.74** | **42,338.19** |
| Medicines Dispensed (2019) | 31,108 | 3568.45 | 793.94 | 1008 | 2850.9 | 1377.74 | 40,707.03 |

***Cancer hospitals in Mullanpur and Muzaffarpur are not commissioned. The Centre for Cancer Epidemiology is not a treatment centre.**

***DNA**, Data Not Available; **NA**: Not Applicable; **SNA**, Service Not Available.*

**CT**, Computed Tomography; **ICU**, Intensive Care Unit; **IHC**, Immunohistochemistry;

**MRI**, Magnetic Resonance Imaging; **PET**, Positron Emission Tomography;

**SPECT**, Single-Photon Emission Computed Tomography.

**ACTREC:** Advanced Centre for Treatment, Research & Education in Cancer, Navi Mumbai

**BBCI:** Dr. B. Borooah Cancer Institute, Guwahati

**Sangrur:** Only the Homi Bhabha Cancer Hospital

**TMH:** Tata Memorial Hospital, Mumbai

**Varanasi:** Both hospitals; the Homi Bhabha Cancer Hospital & the Mahamana Pandit Madan Mohan Malaviya Cancer Centre

**Vizag:** The Homi Bhabha Cancer Hospital & Research Centre, Visakhapatnam.

# TATA MEMORIAL CENTRE

# Academics Director's Message

Tata Memorial Centre (TMC) is a Grant-in-aid institute under the Department of Atomic Energy (DAE) and is a stand-alone post-graduate institute under Homi Bhabha National Institute (HBNI), which is a deemed to be University under Department of Atomic Energy. The TMC stands tall on 3 pillars of Service, Education & Research and here we will discuss about the pillar of Education. For the last more than 75 years now, TMC has been contributing in the development of trained manpower in oncology for the entire nation by imparting knowledge through various educational and research activities. Recently, we are also helping other Low- and Middle-Income Countries (LMIC) in this regard.

TMC does not train MBBS students only; however, we have B.Sc. and M.Sc. courses in oncology nursing, clinical research, radio-physics, etc. We also run technological and skill development courses. Since last few years we have started the “Kevat”, a unique, first of its kind in India, patient navigator training course. We offer MD courses in 8 subjects namely Anesthesiology, Microbiology, Nuclear medicine, Palliative medicine, Pathology, Radio-diagnosis, Radiotherapy and Transfusion medicine. We offer DM in 6 subjects - Critical care, Gastroenterology, Interventional radiology, Medical oncology, Onco-pathology & Pediatric oncology; and, M.Ch in 4 subjects – Gynecological oncology, Head & Neck surgery, Plastic surgery & Surgical oncology. We also offer PhDs in both Health-sciences and Life-sciences. There are 18 Principal Investigator (PI) Labs in the Advanced Centre for Treatment, Research & Education in Cancer (ACTREC) at Kharghar, Navi Mumbai that take in up to 25 new PhD students each year. We hope to start all these courses soon in all our newly started peripheral centres.

Most of the teaching activities are carried out under HBNI University and all our medical courses are recognized by the Medical Council of India (MCI). Few of the Technical courses are carried out under the aegis of Maharashtra State Board of Technical Education (MSBTE). At any given time, there are more than 1200 students registered in various courses in TMH. We have in place collaborative student-exchange programmes with Seth G.S. Medical College & KEM Hospital; Wadia Children's Hospital; and, Lokmanya Tilak Municipal Medical College & General Hospital for training of our MD students. I would like to take this opportunity to thank the Deans & respective Department Heads of these medical colleges for all the help extended.

TMC also runs various HBNI Fellowships as well as TMH Fellowships. Last year we received approval to start 3 new certified HBNI Fellowships in Pulmonary Oncology, Molecular Hemato-Pathology, Maxillo-Facial Onco-Surgery; as well as, MSc in Nuclear Medicine Information Technology. This year we received approval to start 2 additional courses namely M.Sc. in Occupational Therapy in Oncology and M.Sc. in Public Health & Epidemiology. We have put in a proposal for 2 more courses viz, M.Sc. in Patient Navigation (Oncology) and the start of ambitious MD-PhD Program. We are finalizing the proposal for starting the “Nurse Practitioner” and “Physician Assistant” programmes so that we have more hands to take care of our patients & free the students for more training especially in allied branches & research activities. We also offer 6 months trainee / observership in all the fields of oncology. TMC is recognized as a Training Centre

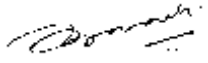
in Cancer Education and Research by several National & International Organizations including the World Health Organization (WHO), the International Atomic Energy Agency (IAEA), the International Network for Cancer Treatment and Research (INCTR), and Governments of various African & SAARC countries.

In the year 2020, because of the Covid-19 pandemic and the travel restrictions that came with it, the training of both Indian and International Trainees had to be suspended. Similarly, our eagerly awaited "Summer School in Oncology", a training programme for 2 weeks for undergraduate and post-graduate medical students, had to be cancelled! The Covid-19 pandemic is expected to continue to influence the way we work for years to come. The pandemic forced us to accelerate our virtual communication tools and last year we not only did all the teaching virtually, but also conducted most exams as well as selection interviews virtually. This also helped us to reach more students than ever!

In addition to these courses, the TMC as well as the individual departments and Disease Management Groups (DMGs) conduct various Continuing Medical Education (CME) activities all throughout the year, including our Annual Meeting on Evidence Based Medicine. Again, because of the pandemic, all these were conducted virtually this year. At TMC, we always try to give value-based education. Since last few years, a number of special lectures were also organized in the field of Medical Humanities. We also hope to soon conduct value-added courses for students to develop their soft skills, especially in the field of effective communication.

I take this opportunity to thank all the medical and non-medical students who work day and night and are really are the lifeline of this hospital & without whose support we would not be able to take care of the nearly 70,000 patients who come not only to TMH, but also those registered at our outreach centers in Varanasi, Sangrur, Vizag, Mullanpur, Guwahati, and Muzaffarpur. I also like to take this opportunity to thank Director TMC, Dr. RA Badwe; Director TMH, Dr. CS Pramesh; & the entire administration of TMC for their constant support. With their support we have improved the accommodation for our residents and hope to improve it further in the near future once the Haffkine hostel facility is commissioned. We have increased the pay scales and stipends of both resident doctors &other students recently, which they all really deserved. I also take this opportunity to thank the Vice Chancellor and the entire HBNI Team for all their help and cooperation over the years. Last but not the least, I would also personally like to thank Dean Academics (Projects), Dr Kailash Sharma, for his constant support & guidance; Dr Siddharth Laskar my deputy-director; Dr Sarbani Laskar, in-charge of Student-Affairs; & the entire staff of Academic Section for all their hard work because of which we could continue all the academic activities without a glitch even in these trying times of Covid-19 pandemic!

Lastly, some advice to you all young students who have just graduated. I would request you to use the knowledge acquired in the true spirit. With knowledge, there comes the responsibility to use it for the betterment of the society! Let there be fusion of science and human values. I wish you all the very best.



**Dr SD Banavali**

# Education

**Director Academics**
**Prof. Shripad D. Banavali**

**Dean Academics (Projects)**
**Prof. Kailash Sharma**

**Dy. Director Academics**
**Prof. Siddhartha Laskar**

**In-charge, Students Affairs**
**Prof. Sarbani Ghosh Laskar**

Tata Memorial Centre (TMC) is a Grant-in-aid institute under department of Atomic Energy and is a stand-alone post-graduate institute under Homi Bhabha National Institute (HBNI), which is a deemed to be University under Department of Atomic Energy. For the last more than 75 years now, TMC has been contributing in the development of trained manpower in the field of oncology for the entire nation by imparting knowledge through various educational activities

The Mumbai units of TMC comprising of Tata Memorial Hospital (TMH), Advanced Centre for Treatment, Research and Education in Cancer (ACTREC), and Centre for Cancer Epidemiology (CCE), are where academic activities exist presently. We have B.Sc. and M.Sc. courses in Oncology nursing, Patient navigation (Kevat), Clinical research, Radio-physics, etc. We also run technological and skill development courses. More than 100 students were registered in all these courses in 2020. We offer MD courses in 8 subjects namely Anesthesiology, Microbiology, Nuclear medicine, Palliative medicine, Pathology, Radio-diagnosis, Radiotherapy and Transfusion medicine. 92 students were registered for these courses in 2020. We also offer DM in 6 subjects - Critical care, Gastroenterology, Interventional radiology, Medical oncology, Onco-pathology & Pediatric oncology; MCh. in 4 subjects – Gynecological oncology, Head & Neck surgery, Plastic surgery & Surgical oncology. A total 63 students were registered under these courses in 2020 at TMH. We also offer PhDs in both Health-sciences and Life-sciences. There are 18 Principal Investigator (PI) Labs in the Advanced Centre for Treatment, Research & Education in Cancer (ACTREC) at Kharghar, Navi Mumbai who take in up to 20 new PhD students each year.

TMC also runs various HBNI certified Fellowships as well as TMH Fellowships. Last year we started 5 new HBNI certified courses: M.Sc. (Occupational Therapy in Oncology); M.Sc. in Nuclear Medicine Information Technology; Fellowship in Pulmonary Oncology; Fellowship in Oral Oncology with Reconstructive Surgery; & Fellowship in Molecular Hemato-Oncology. We also offer 6 months' trainee / observership in all the fields of oncology. TMC is recognized as a Training Centre in Cancer Education and Research by several National & International Organizations including WHO, IAEA, INCTR, and Governments of various African & SARC countries. Through the TMC – Merck Foundation Scholarship program & Government of India's Third India - Africa Forum Summit Fellowship program, since 2016 TMC has trained more than 120 oncology related personnel from various African countries. Because of the Covid-19 Pandemic and the ensuing travel restrictions, we had to keep our International training on hold in 2020. Still, 28 overseas specialists visited TMC in 2020. In spite of the pandemic related lockdown & travel restrictions, 130 specialists from various parts of India have visited Tata Memorial Centre as Observers from all over India in the year 2020.

TMC in collaboration with Kings College London & Tata Trusts has been organizing “Summer School in Oncology”, a training programme for 2 weeks for undergraduate and post-graduate medical students. Nearly 150 selected students from Government Medical Colleges from across the country are hosted by TMC and exposed to various aspects of oncology. However, because of the Covid-19 pandemic, this course had to be cancelled in 2020. Like all across the Globe, Covid-19 really changed the way academics was done even at TMH. Not only all the Teaching was web based, we even conducted most of the MD / DM / MCh exams online as per the NMC guidelines. Even most of our Entrance Exams for technical courses & Fellowships were successfully done through web-based proctored exams. In addition to the courses, TMC as well as individual departments and Disease Management Groups (DMGs) conduct various CME activities all throughout the year, including our Annual Meeting on Evidence Based Medicine. Even most of these were done on web-based platforms.

Additionally, similar academic activities are also taking place at Dr. B. Borooah Cancer Institute in Guwahati, Assam. TMC now has begun the process of starting similar academic activities in various other TMC branches like HBCH in Sangrur (Punjab), HBCH & MPMMCC in Varanasi (UP), HBCH in Vizag (AP).

## University Degree Courses

| Name of the Course | Duration | Approved By | Students admitted | Recognized University | Passed |
|---|---|---|---|---|---|
| M.Ch. (Surgical Oncology) | 3 - Year Super-speciality courses (Post MD) | Medical Council of India (MCI) | 24 | Homi Bhabha National Institute | 15 |
| M.Ch. (Gynecological Oncology) | | | 02 | | 02 |
| M.Ch. (Plastic Surgery) | | | 04 | | 01 |
| M.Ch. (Head & Neck Oncology) | | | 04 | | 04 |
| D.M. (Medical Oncology) | | | 16 | | 15 |
| D.M. (Critical Care) | | | 03 | | 02 |
| D.M. (Paediatric Oncology) | | | 03 | | 03 |
| D.M. (Gastroenterology) | | | 02 | | 02 |
| D.M. (Interventional Radiology) | | | 02 | | 02 |
| D.M. (Onco-pathology) | | | 03 | | 00 |
| M.D. (Pathology ) | 3 - Year broad speciality (MD) courses Homi Bhabha National Institute (HBNI) approved | | 12 | | 10 |
| M.D. (Anesthesiology) | | | 30 | | 22 |
| M.D. (Radiodiagnosis) | | | 17 | | 17 |
| M.D. (Radiotherapy) | | | 18 | | 18 |
| M.D. (Microbiology) | | | 01 | | 01 |
| M.D. (Immuno-Hematology & Blood Transfusion) | | | 05 | | 01 |
| M.D. (Nuclear Medicine) | | | 06 | | 06 |
| M.D. (Palliative Medicine) | | | 03 | | 04 |
| Post Graduate Diploma in Fusion Imaging Technology | 1-year & 1-year Internship | HBNI approved | 10 | Homi Bhabha National Institute | 10 |
| M.Sc. Clinical Research | 2-year & 1-year Internship (Bond) | | 00 | | 09 |
| M.Sc. Nursing | 2-year course | | 03 | | 10 |
| M.Sc. Nuclear Medicine & Imaging Technology | 2-year & 1-year Internship (Bond) | | 05 | | 00 |
| M.Sc. Occupational Therapy in Oncology | 2-year | | 05 | | 00 |
| Ph.D. Health Science | 5-year | | 00 | | 01 |
| | | **Total** | **178** | | **155** |

**In the year 2020, a total of thirty-three (33) students were selected for the 2-year (plus one-year internship) Advanced Diploma courses in Radiotherapy Technology (ADRT) and in Medical Imaging Technology (ADMIT), conducted under the Maharashtra State Board of Technical Education (MSBTE), Directorate of Technical Education, Government of Maharashtra. For the above exams held in 2020, twenty-seven (27) students passed the exams.*


TATA MEMORIAL CENTRE
INSTITUTIONAL REVIEW BOARD
RECEPTION

# Ethics Committees

Regulatory boards were in place since a very long time at every reputed pharmaceutical company to monitor the efficacy and safety of their drugs and its side effects. The concept of introducing regulatory board in hospitals originated from the lack of guidelines for performing abortions in the US around the 1960s. Slowly, the concept was introduced to include daily hospital practices. Other nations too followed; and after 1980, many countries started introducing ethical or regulatory committees to look after patient safety, both, when under the course of routine treatment and, when included for medical research studies. Many countries established these committees in their hospitals to suit their political and/or religious principles as well.

The first such committee formed at Tata Memorial Centre (TMC) was the Human Ethics Committee (HEC) in the year 1996. Next year (1997), the Hospital Scientific Review Committee (HSRC) was constituted. In the year 2012, the HEC and the HRSC were merged to form the Institutional Review Board (IRB). The IRB was renamed as the Institutional Ethics Committee (IEC) in 2013.

The mandate of Institutional Ethic Committees was to oversee and monitor ethical aspects of research projects only; mainly related to informing the patients in detail about the nature and purpose of the research study, their approval with full understanding in the language they could comprehend, and ensuring their safety during the course of such research trials. To this end, there was a separate division under the IEC called the Data Safety & Monitoring Unit (DSMU). The other responsibilities of the IECs included: maintaining the highest standards in clinical research; to formulate institutional policies & guidelines for clinical trials; to have quality control measures on the data and its analyses; and, to be at the forefront as the Indian standard of reference in cancer management.

The ethical and safety aspects of routine daily and day-to-day management were under the purview of the Office of the Medical Superintendent.

As research was one of the three mandates of TMC's policy, many individual IECs were constituted. There were two IEC in the Tata Memorial Hospital in Mumbai; IEC-I and IEC-II. At ACTREC in Navi Mumbai, there was IEC-III. The Homi Bhabha Cancer Hospital and the Mahamana Pandit Madan Mohan Malaviya Cancer Centre in Varanasi were governed by a single committee, the IEC-Varanasi from the year 2019. The fifth IEC formed under TMC was at the Homi Bhabha Cancer Hospital & Research Centre in Visakhapatnam, late in the year 2020 and was named IEC-Vizag.

# Research Secretariat, Clinical & Department of Atomic Energy Clinical Trials Centre

The Clinical Research Secretariat (CRS) along with Department of Atomic Energy Clinical Trials Centre (DAE-CTC) played a key role in facilitating research in field of oncology at Tata Memorial Centre (TMC) since its inception. The mandate of CRS included promoting clinical research, training and education of researchers & research staff, ensuring scientific and ethical conduct of clinical trials, and propagation of practice of Evidence Based Medicine (EBM) across the country.

In year 2020, the following activities were conducted in each of the domains mentioned below:

## Promoting Clinical Research

**1. Augmentation of Infrastructure:**

- A Dedicated statistician cell was created in the CRS; two statisticians were supported by senior Biostatisticians from ACTREC and CCE.
- Central Pharmacy: For storage of all trial related drugs at required temperature in compliance with the Schedule Y (Investigator Product Management), International Conference on Harmonisation-Good Clinical Practice (ICH-GCP)-E6) with controlled access. In addition, for storage of trial medicines under strict temperature control, a walk-in cooler along with automated alarm system for temperature deviations was installed. A new dedicated Research Pharmacist was appointed.
- Filing Storage space: There were two Filing storage spaces to store all the clinical trial records in compliance with ICH-GCP; both having dedicated storage spaces with controlled access only to authorized trial personnel.
- Monitoring Room: There were two dedicated well-equipped trial monitoring rooms. In addition to CRS Monitoring Room situated at Main Building, an additional Monitoring room for monitoring in the expanded CRS area at Homi Bhabha Block (HBB) was provided. This facilitated monitoring the plan lay out by the sponsors and investigators of a clinical trial, as well as to monitor those visits.
- A dedicated consenting room was being setup in the CRS to facilitate Patient Audio Video Consenting.
- In addition, space was provided for the staff & infrastructural support for the National Cancer Grid at CRS Hub, Main building.

**2. Statistical support for the Clinical Trials:**

The statisticians at CRS provided expert help to clinical researchers in designing of trial, sample size calculation, randomization list generation and analysis. CRS also provided the statistical analysis software (SPSS version 25.0+) for all investigators.

In 2020, statistical support to 785 clinical trials and projects in the following areas were provided:

Analysis – 545

Randomization list generated – 38

Sample size – 69

Statistical Method – 88

electronic Case Report Form (e-CRF) generated on REDCap – 06.

In addition, the CRS supported the process of central randomization on an ongoing basis for 39 trials. Virtual Tutorial on SPSS was conducted on 30th October, 2020 with over 450 registrations. Besides the in-house statisticians, CRS coordinated and provided on-site services and consultations with senior biostatisticians from ACTREC and CCE to expedite and resolve statistical queries and address the needs of researchers on a timely basis.

**3. Financial support for the clinical trials:**

A total of six Intramural trials (ongoing and new) were supported through the DAE-CTC and a total of INR 38,76,250/- was provided as financial grant. Over the years, many of these DAE-CTC supported studies led publications in major journals and also resulted in significant change in medical practice.

**4. Translation facilities for Informed Consent Forms (local/vernacular languages) for Clinical Trials:**

A dedicated Translator supported the constantly increasing language translation work burden. The Translator provided the expert help to clinical researchers in Informed Consent translations and back translation in both Marathi and Hindi languages. A total of 73 clinical trial consent forms were translated in Hindi and Marathi languages.

**5. Network and Database Administrator:**

CRS had a dedicated Network administrator responsible for designing, development and testing of new features in the Clinical trial applications. This included:

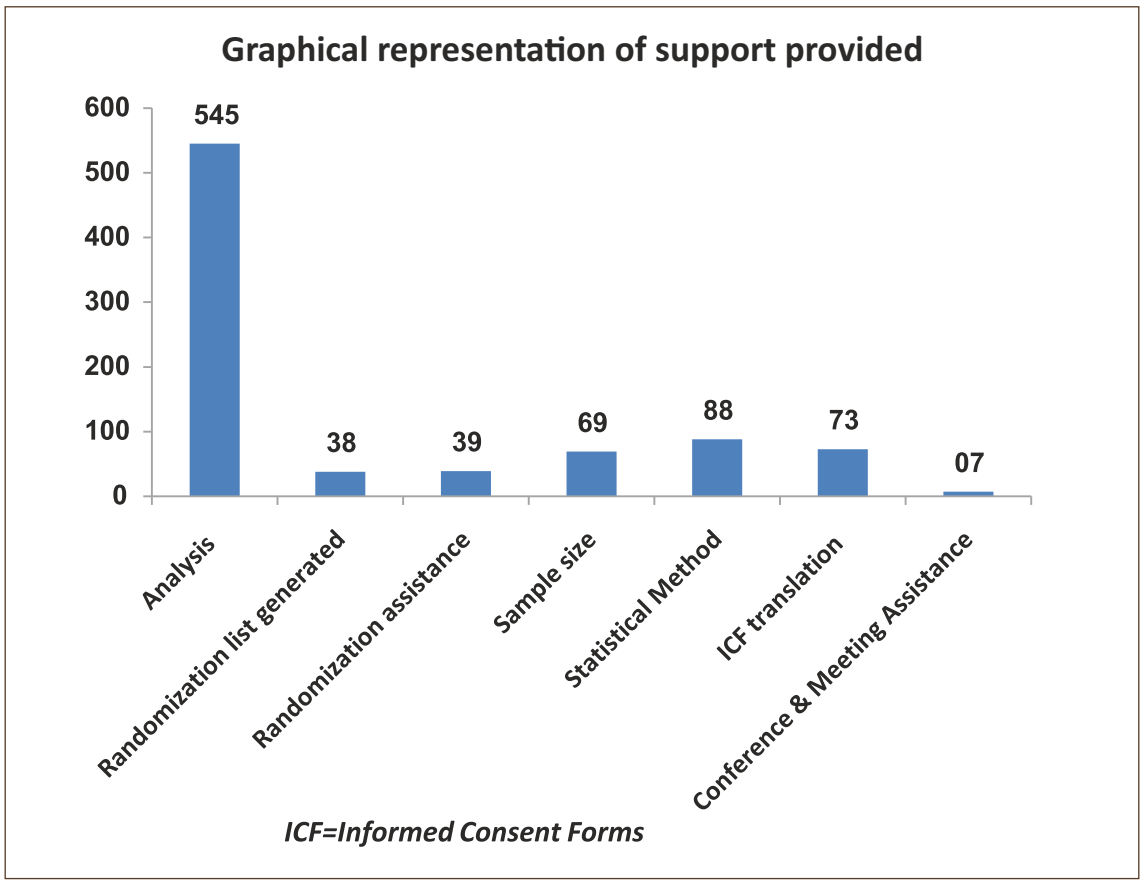
- Design and implementation of software projects using C# Visual Studio 2017
- Design, create, and implement database systems based on the end user's requirements
- Creation of new tables and procedures using SQL server 2012.

New software developed included: Pharmacy stock management system (CRS Department), Proluton Study (Breast DMG), Cosmesis Study (Breast DMG), Conference Data Management Software and DMG application.

CRS also initiated the process of setting up of a centralized Clinical Trial Database Management System (CTMS).

**6. Support to Conferences and Meetings:**

A total eight conferences and meetings were supported in the year 2020. The CRS supported two virtual conferences attended by 1200 delegates. In addition, the CRS provided logistical and advisory inputs to many other meetings and events. Further assistance was provided while availing of the Maharashtra Medical Council's (MMC) Continuing Medical Education (CME) Credit point's application.




**7. Standard Operating Procedure:**

The CRS was involved in conducting numerous trials including Investigator initiated, pharma-sponsored, collaborative studies (International and National) and the thesis of postgraduate students.

A detailed SOP for conducting research was prepared at Tata Memorial Hospital. These SOPs were designed to have uniform standard, quality assurance and quality control for the conduction of all the clinical Studies/research at TMC.

The key element of the SOP included: Assessing Protocol Feasibility; clinical trial agreement with Sponsors or Contract Research Organizations (CRO); interaction with IEC; study/research team responsibilities; communication with Sponsor or CRO; site initiation, activation, conduct & close out; reviewing & obtaining Informed Consent Form; recruiting study subjects; source

documentation; managing investigational product; archival of essential documents; safety reporting; Clinical Research Pharmacy Management; managing biological samples; reimbursement policies; the study team training & the study handover; and, the transfer of patients between TMH & ACTREC.

The SOP's were designed to assure execution of research in accordance with Institutional guidelines, updated applicable national guidelines and regulations (e.g. Schedule Y, Indian GCP, ICMR guidelines, ICH GCP).

SOP training and education was provided to the research team of TMC. It was mandatory that every research staff should be trained and must be aware of the TMC SOP before conducting research.

The CRS was also developing SOPs for the statistical support. This would help streamline these services.

## Training & Educating Researchers

1. **Good Clinical Practices:**

   A training session was organized to appraise the TMC Staff about ICH-GCP principles in January 2020. The Basic GCP course module was attended by 85 participants and the Advanced module by 58 delegates.

2. **Clinical Research Methodology:**

   A workshop was organized on all the Saturdays in the month of September 2020 in a virtual format, to train researchers on various aspects of trial design and analysis. A total of 428 delegates (local and national) attended the conference

3. **M. Sc. Clinical Research:**

   The CRS was actively involved in M. Sc Clinical Research course. There were a total of nineteen (19) students; ten (10) students in second year of their courses, and nine (09) doing Internship training in various Disease Management Groups after successfully completing their M. Sc course.

   The following support was provided to the all students:

   - Coordinating entrance exam and interview
   - Coordinating lectures and study material
   - Managing lectures, invigilating exams
   - Managing honorarium payments to invited faculties for conducting lectures
   - Managing mini library and arranging for the study books
   - Rotations through various external postings for comprehensive training
   - Maintaining leave records and attendance.

## Evidence Based Management (EBM) Meeting 2020

The important aim of CRS/ DAE-CTC was to propagate and promote practice of evidence-based medicine, especially in cancer. In this regard Evidence-Based Management meetings were started about a decade and half ago.

The philosophy behind the meeting was to identify and answer focused questions relevant to oncology practice in India. National faculties and International faculty members were invited every year, and who were experts in the subspecialty of oncology. The deliberations, typically went on for 2-4 days, and included talks on a topic pertinent to the Indian cancer scenario.

The XVIII Annual EBM had two parallel pre-conference held on 27th February 2020 viz.
(1) Masterclass in Neurosurgical Oncology 2020 and,
(2) Research Methods in Palliative Medicine.

Three (03) parallel Conference modules viz. a) Contemporary Management in Neuro-Oncology b) Current Concepts and Controversies in Palliative Medicine and, c) Urological Cancers: A Decade of Transformation which were organized as parallel session from 28th February to 1st March 2020. The meeting was a huge success with 900 participants attending included International and National faculty, Delegates and TMC Consultants, Residents and Staff.

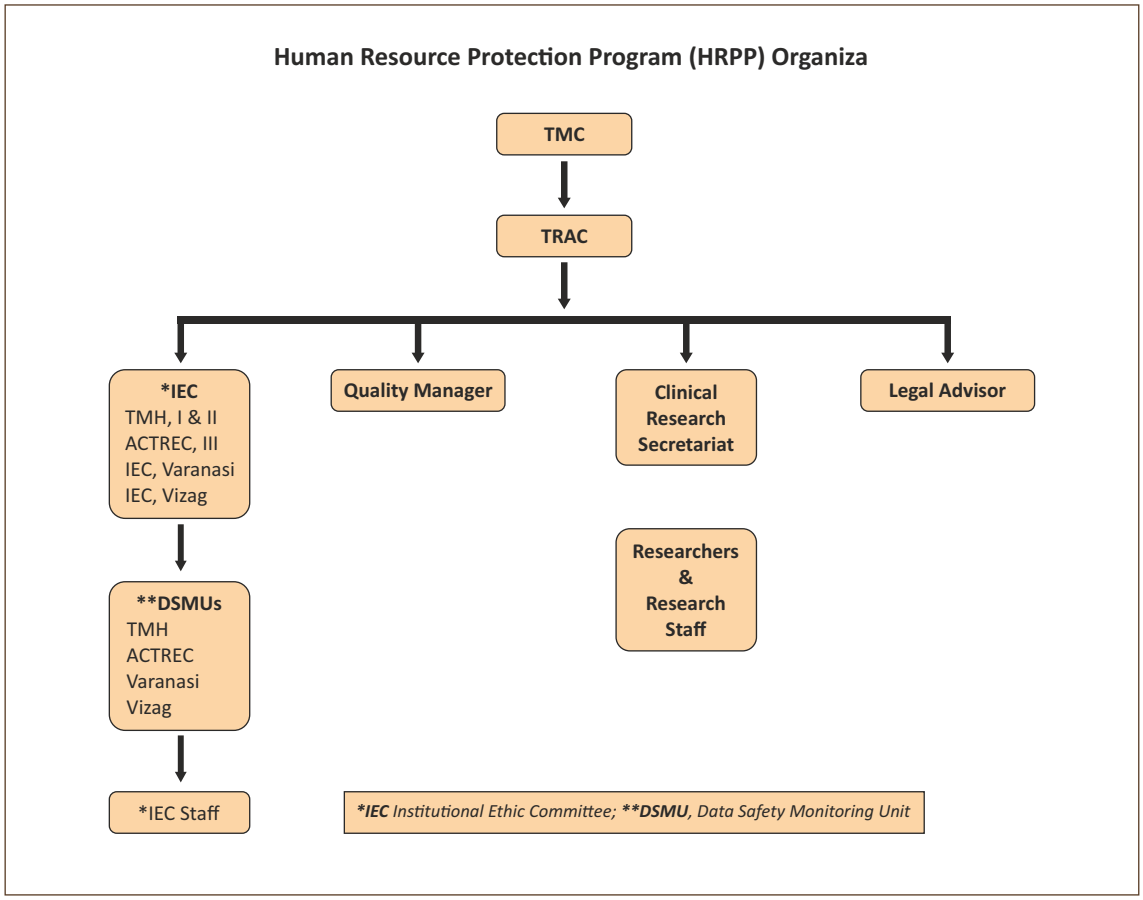
The **Hospital Day Oration** was given by **Dr. Roger Stupp**, Medicine (Hematology/Oncology), Neurology and Neurological Surgery, Northwestern University Feinberg School of Medicine; Co-Director, Northwestern Medicine Malnati Brain Tumor Institute, Zürich, Switzerland on the topic entitled “Management of Glioma: Translating evidence into meaningful treatment and care”.

Three Evidence-Based Medicine books on Contemporary management in Neuro-oncology, Guidelines for Urological Cancers & Current concepts in Palliative Medicine were published.

**EBM 2020 adopted the Go Green initiative, using eco-friendly merchandise and reducing the use of paper and disposable plastic whenever possible.**

# TMC Research Administrative Council (TRAC)

The Tata Memorial Centre's Research Administrative Council (TRAC) was constituted in the year 2008, and had a broad mandate to maintain and improve in all aspects basic, translational and clinical research in TMC.




**The focus of TRAC was specifically on the following areas:**

- Establishment of Human Research Protection Program and its implementation.
- Set directions, priorities and thrust areas for research as per institute's mandate.
- Suggest and review proposals for collaborations between TMC, and with other Indian or International Institutions, Groups, Individuals or industry. When required, suggest the names of possible Principal and Co-investigators within TMC for this collaboration.
- Review pre-proposals for sponsored research and suggest the names of possible Principal and Co-investigators within TMC.
- Review the expenditure and income incurred on hospital services, laboratory and administrative functions for investigator initiated and sponsored research conducted in TMC.

## TMH & ACTREC, Mumbai

**Activities:**

- The support, training and guidance for constituting the Institutional Ethics Committee at TMC's Homi Bhabha Cancer Hospital & Research Centre, Visakhapatnam. The IEC was functional from September 2020.
- Continued support to IEC at MPMMC & HBCH, Varanasi for day to day functioning of IEC and financial support to the projects.
- Implementation of Phase II of the IRB portal.
- Processing Grant applications for Terry Fox International Research awards.
- Quality Improvement plans – Audits of functioning of IEC-I, II, III and research projects at regular intervals.
- Financial support was granted for sixteen (16) research projects.

**Future Goals:**

- Phase –III of IRB Portal for research projects life cycle
- Implementing IRB portal for online project submission to satellite centres like Varanasi, Visakhapatnam and Sangrur
- The quality control program for research projects
- To monitor the progress of research studies supported by institutional funds
- To develop online education models for researchers and staff
- Capacity building for Scientific and Ethical review process.

## MPMMCC & HBCH, Varanasi

The IEC of MPMMCC & HBCH was established in September 2019 as per the New Drugs and Clinical Trial Rules, ICMR and ICH- GCP guidelines. The IEC of MPMMCC & HBCH was constituted by the Director, MPMMCC & HBCH under the authority vested by the Governing Council of Tata Memorial Centre.

The committee was registered with National Ethics Committee Registry for Biomedical and Health Research, Department of Health Research vide registration no. EC/New/INST/2020/822 on 7th July, 2020 and was valid for 2 years.

**Training:**

SOP training sessions for IEC members and investigators was arranged in October 2019.

**IEC Performance:**

The committee conducted ten (10) full-board committee meetings in 2020 for meticulous scrupulous examination of the scientific and ethical contents of submitted projects, owing to which sixty-six (66) new projects in 2020 and seven (07) projects from 2019 were examined. The entire spectrum of studies involving human subjects including epidemiological studies, biological studies on human tissues, retrospective audits, Pharmacokinetic studies and human clinical trials using drugs or additional invasive intervention were discussed and approved by the committee.

**Future steps:**

To further reduce the carbon foot-print by being more paperless for all kinds of communications to and from the IEC. TRAC would launch a web portal (https://iecportal.org) for online submission, review, and tracking status of research projects from January 2021.

## HBCHRC, Visakhapatnam

The IEC of HBCHRC was reconstituted on November 2020 as per the New Drugs and Clinical Trial Rules, ICMR and ICH- GCP guidelines. The IEC of HBCHRC is constituted by the Director HBCHRC under the authority vested by the Governing Council of Tata Memorial Centre.

The committee was registered with National Ethics Committee Registry for Biomedical and Health Research, Department of Health Research vide registration no. ECR/1370/INST/AP/2020 and was valid until April 2, 2025.

**Training:**

SOP training sessions for IEC members and investigators was arranged in September 2020.

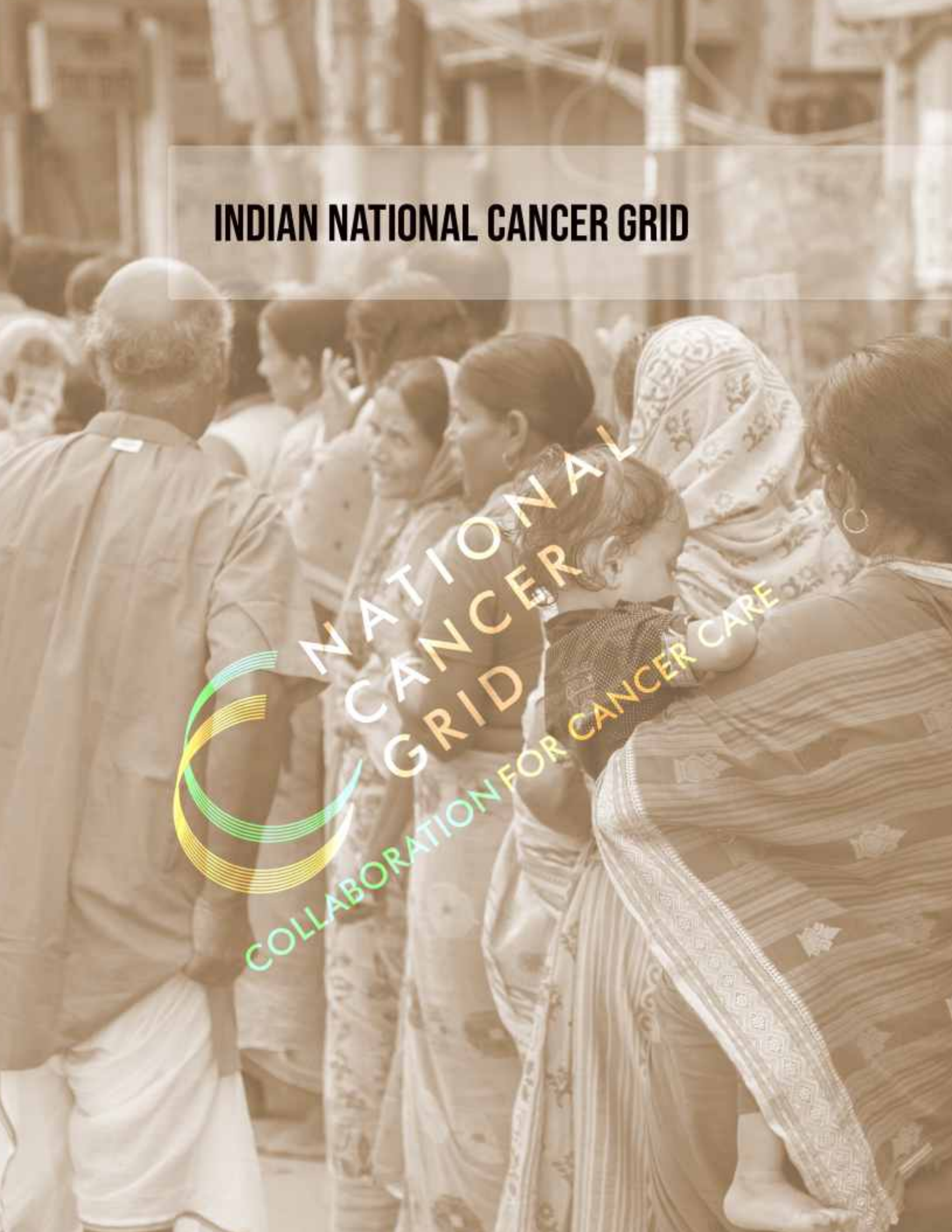
**IEC Performance:**

The committee conducted two (02) full-board committee meetings in 2020 for meticulous scrupulous examination of the scientific and ethical contents of submitted projects, owing to which four (04) new projects in 2020 were examined. The entire spectrum of studies involving human subjects including retrospective audits, and human clinical trials using drugs or additional invasive intervention were discussed and approved by the committee.

## HBCH, Sangrur

The process for establishing Ethics Committee for HHBCHRC Sangrur was initiated in November 2020. The members being identified and their CV and training records collected to find suitability for the inclusion.

# INDIAN NATIONAL CANCER GRID



# National Cancer Grid

The National Cancer Grid (NCG) was established in the year 2012 and was funded by the Government of India through the Department of Atomic Energy (DAE). The NCG was a large network of 236 cancer centres, research institutes, patient groups, professional societies and charitable institutions across India with the mandate of establishing uniform standards of patient care for prevention, diagnosis, and treatment of cancer; providing specialized training & education in oncology; and, facilitating collaborative basic, translational and clinical research in cancer. In 2020, the NCG achieved several milestones as listed below:

**NCG resource stratified guidelines for common cancers:**

NCG guidelines for common cancers were revised in September 2019 to include recent evidence and resource stratification to improve the applicability. These guidelines included three categories: Essential, Optimal, and Optional; based on the strength of evidence, cost-effectiveness, and available resources. The National Health Authority signed a Memorandum of Understanding (MoU) with the NCG to incorporate essential and optimal guidelines in the Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY) scheme for cancer packages to facilitate preauthorization and claims.

**Group negotiation of drugs:**

To ensure wider availability of quality oncology and supportive drugs at the lowest possible cost, NCG took the initiative of group negotiation of drugs, leveraging the strength of the large number of member centres. The first cycle was implemented and was likely to have remarkable savings for high cost and high-volume drugs. The stringent quality assessment criteria would ensure that quality drugs were procured at reasonable cost, thereby making cancer care more affordable for patients.

**Patients' health record integration:**

Enabling patients to become the owner of their health records was one of the objectives of NCG. This would allow seamless care of patients across different centres irrespective of their geographical location. A proof of concept was conducted, linking the electronic medical records of three (03) cancer centres for dummy patients. The pilot project aimed to link the EMR data as well as the Picture, Archiving & Communication System (PACS) data with a subsequent Phase II. Efforts were on way for an open source, so that other developers could further improve the product.

**Biotechnology Industry Research Assistance Council's (BIRAC) Clinical trial network grant:**

The NCG successfully secured a highly competitive grant of INR 16 crore for strengthening the clinical network involving ten (10) cancer centres. This grant would allow the NCG to develop a robust platform for conducting clinical trials with Indian Biopharmaceutical/Biotechnology companies to develop cost-effective therapeutics & technology, while building institutional capacity for clinical research.

**Funding for multi-centric clinical trials:**

Supporting the conduct of multi-centric clinical research was another of the NCG mandates.

In year 2020, the NCG funded four (04) new studies, bringing the total number of collaborative practice-changing studies funded by the NCG to eleven (11).

**NCG Clinical Research Organization (CRO):**

The CRO assisted in the international peer review of eight research protocols submitted to NCG for funding and also carried out the annual status review of all the ongoing eight studies and regular monitored of the studies that were undertaken. The Standard Operating Procedures (SOPs) were revised within the timelines. The NCG CRO conducted training for site teams on aspects of Good Clinical Practice (GCP) and Informed Consent.

**NCG Library services:**

The library continued to provide access to medical journals and books to the registered members of NCG. It also provided plagiarism check services for 300+ manuscripts and theses. The library launched a discovery tool – Akshara- that provided access to browse and search at article level for 17,000 indexed journals, videos, monographs, and presentations. The required full-text articles could be requested from the local libraries.

**NCG External Quality Assessment scheme (EQAS):**

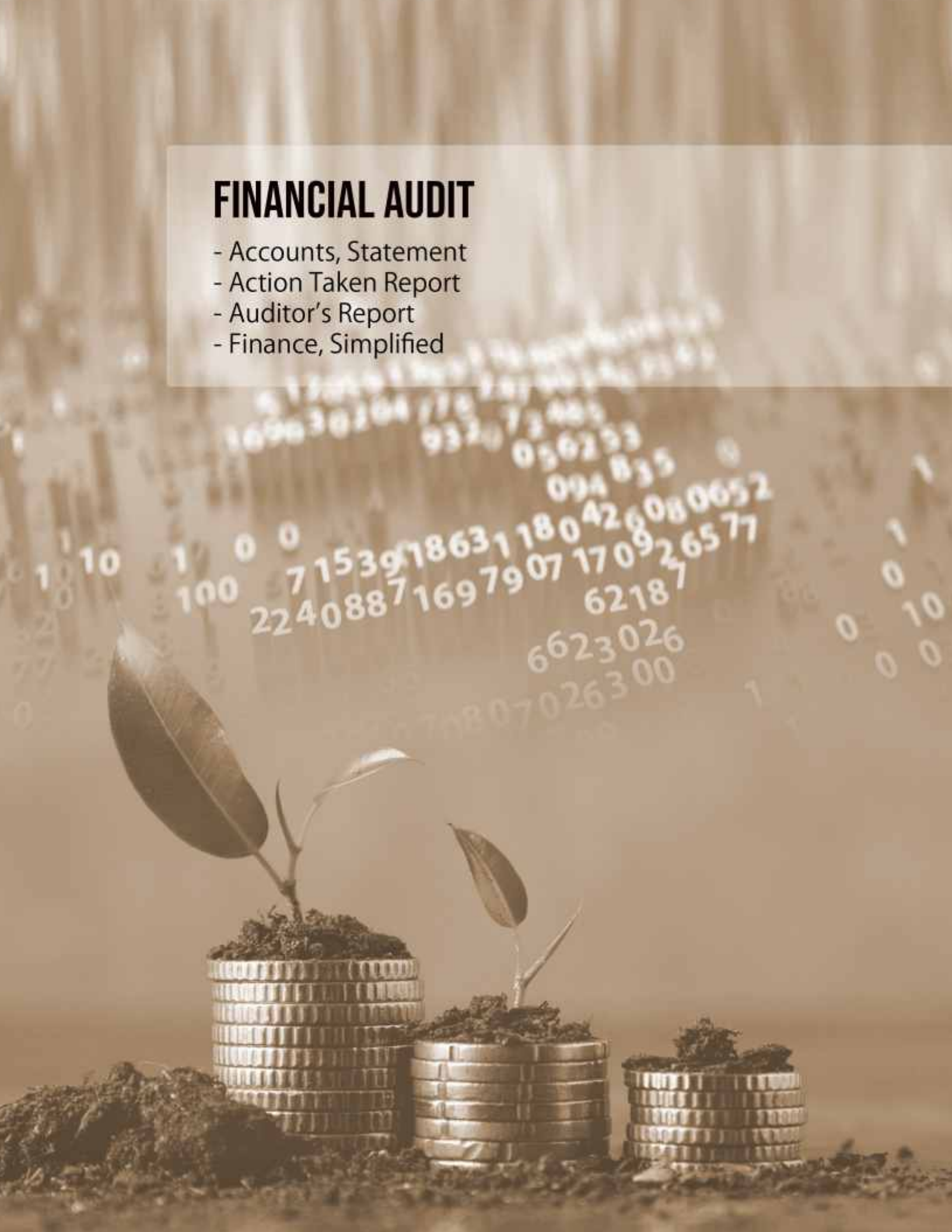
The Surgical Pathology and histopathology practices in India were heterogeneous and driven by patient affordability. The result of this was that the test results were variable. The National Cancer Grid External Quality assurance program was run under the auspices of the National Cancer Grid. The NCG-EQAS aimed to standardize histopathology and Oncopathology practices across the country with the motto "Towards One practice for all". The NCGEQAS was initiated from 18th February, 2017. It was the only affordable program for Immunohistochemistry evaluation in the country. Till 2020, there were 149 centres actively participating (59 NCG centres and 90 non-NCG centres) in Haematoxylin & Eosin (H&E) staining EQAS and Immunohistochemistry (IHC).

**NCG Annual meeting:**

The annual meeting was conducted on 9 - 10 March, 2020. The meeting was attended by the directors and other faculty members of the NCG centres. During the meeting, the annual reports of all the NCG activities were presented. In addition, the key discussions included integration with the National Health Authority and cooperation with the Ayushman Bharat scheme, international collaborations, digital health and patient record integration, collaboration between the Department of Biotechnology and palliative care augmentation.

# FINANCIAL AUDIT

- Accounts, Statement
- Action Taken Report
- Auditor's Report
- Finance, Simplified



# TATA MEMORIAL CENTRE

TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER.

BALANCE SHEET AS AT 31ST MARCH, 2021

in ₹

| PARTICULARS | Schedule | As at 31.03.2021 | As at 31.03.2020 |
|---|---|---|---|
| CAPITAL FUND AND LIABILITIES | | | |
| Capital Fund | 1 | - | - |
| Earmarked / Endowment Fund | 2 | 3,65,31,41,842.00 | 2,89,64,92,858 |
| Academic Fund | 3 | 18,53,17,706.00 | 15,23,98,767 |
| Current Liabilities & Provisions | 4 | 24,18,50,73,830.00 | 23,66,28,45,263 |
| TOTAL | | 28,02,35,33,378 | 26,71,17,36,888 |
| ASSETS | | | |
| Fixed Assets | | | |
| Gross Block | | 10,99,84,90,875 | 10,15,30,37,396 |
| Less:Provision for Depreciation | | 4,98,15,19,286 | 4,45,59,69,817 |
| Net Block | | 6,01,69,71,589 | 5,69,70,67,579 |
| Capital Work - in - Progress | | 11,07,50,12,739 | 8,94,99,82,253 |
| **Total** | 5 | **17,09,19,84,328.00** | **14,64,70,49,832** |
| Current Assets, Loans and Advances | 6 | 10,62,19,02,721.00 | 10,31,51,63,492 |
| Capital Fund | 1 | 30,96,46,329.00 | 1,74,95,23,564 |
| TOTAL | | 28,02,35,33,378 | 26,71,17,36,888 |
| **Significant Accounting Policies** | 13 | | |
| **Notes on Accounts** | 14 | | |

As per our report of even date attached
For Batliboi & Purohit
Chartered Accountants
Firm Reg No. 101048W

CA Parag Mangekar
Partner
Membership No. : 110096
Mumbai

For and on behalf of the Governing Council

Mr. S Mohapatra, JCFA, TMC
Mr. Anil Sathe, CAO, TMC
Dr. C S Pramesh, Director, TMH
Dr R A Badwe, Director, TMC

# TATA MEMORIAL CENTRE

**TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER**

**INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR ENDED 31 MARCH 2021**

in ₹

| | | Year Ended 31.03.2021 | Year Ended 31.03.2020 |
|---|---|---|---|
| **A) INCOME** | | | |
| Grant in Aid - Govt of India | 7 | 5,60,27,53,000 | 4,05,52,31,326 |
| Hospital Income | | 2,30,15,07,588 | 3,34,83,45,799 |
| Sale of Drugs and Surgical Goods | | 2,57,43,13,305 | 4,01,49,62,358 |
| Interest Income | 8 | 22,81,85,690 | 42,68,86,043 |
| Other Income | 9 | 8,43,74,799 | 9,37,16,618 |
| **TOTAL (A)** | | **10,79,11,34,382** | **11,93,91,42,145** |
| **B) EXPENDITURE** | | | |
| Academic Expenses | | 5,04,92,185 | 7,63,62,202 |
| Consumption of drugs and Surgical Goods | 10 | 2,70,05,31,541 | 3,87,38,24,861 |
| Consumables | | 99,29,37,351 | 1,22,32,11,802 |
| Staff Cost / Salaries | 11 | 6,91,27,19,270 | 6,73,19,19,415 |
| Other Administrative Expenses | 12 | 1,63,86,16,687 | 1,30,19,98,129 |
| **TOTAL (B)** | | **12,29,52,97,034** | **13,20,73,16,409** |
| Excess of Income over expenditure before Depreciation and Provisions on retirement benefits of employees (A-B) | | (1,50,41,62,652) | (1,26,81,74,264) |
| Less : Depreciation | | 56,25,95,168 | 53,39,07,573 |
| Add : Deferred Income (As per AS 12 for Govt Grant for Dep on Equipment) | | 56,25,95,168 | - |
| Less : Provision for Retirement Benefits | | | |
| Gratuity | | 4,95,74,145 | 20,37,52,106 |
| Pension | | 47,24,27,195 | 2,35,77,66,406 |
| Leave Encashment | | 13,09,96,828 | 18,95,40,522 |
| **Balance being deficit / (surplus) for the year trf to Balance Sheet** | | **2,15,71,60,820** | **4,55,51,40,871** |
| **Significant Accounting Policies** | | | |
| **Notes on Accounts** | | | |

As per our report of even date attached
For Batliboi & Purohit
Chartered Accountants
Firm Reg No. 101048W

CA Parag Hangekar
Partner
Membership No. : 110096
Mumbai

BATLIBOI & PUROHIT MUMBAI CHARTERED ACCOUNTANTS

For and on behalf of the Governing Council

Mr. S Mohapatra, JCFA, TMC
Mr. Anil Sathe, CAO, TMC
Dr. C S Pramesh, Director, TMH
Dr R A Badwe, Director, TMC

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

**SCHEDULE 1 - CAPITAL FUND**

in ₹

| PARTICULARS | As at 31.03.2021 | | As at 31.03.2020 | |
|---|---|---|---|---|
| **CAPITAL FUND** | | | | |
| Balance at the beginning of the Year | (1,74,95,23,563) | | (1,22,10,48,667) | |
| Add: Non Recurring Grant Utilised during the year | 3,77,11,93,225 | | 3,92,36,87,184 | |
| Add: Recurring Grant utilised for Capital Expenditure | - | | 1,29,68,674 | |
| Add: Assets purchased from Donation & csr | 34,51,91,462 | | 8,44,28,529 | |
| Add: Assets purchased out of Sponsored Project & Workshop Fund and HBNI | 3,95,21,269 | | 55,81,588 | |
| Add: Actrec - Assets Plan to Donation | 37,27,266 | | - | |
| Add : Others | | | 0 | |
| | **2,41,01,09,659** | | **2,80,56,17,308** | - |
| Less: Deficit/ (surplus) Transferred from the Income & Expenditure Account | 2,15,71,60,820 | | 4,55,51,40,871 | |
| Less: Deferred Income (As per AS 12 for Govt Grant) | 56,25,95,168 | | | |
| Total | | (30,96,46,329) | | (1,74,95,23,563) |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER.

**SCHEDULE 1-A - NON RECURRING GRANT**

in ₹

| PARTICULARS | As at 31.03.2021 | | As at 31.03.2020 | |
|---|---|---|---|---|
| Balance at the beginning of the Year * | 4,51,00,000 | | 60,90,10,000 | |
| Add: Interest | - | | - | |
| Add: Grant Received During the year | 3,74,40,68,092 | | 3,51,51,00,000 | |
| Total | 3,78,91,68,092 | | 4,12,41,10,000 | |
| Less: BARC Grant Utilsed for RRU | - | | 12,29,51,530 | |
| Less: Grant Utilised for SUPPORT TO PAEDIATRIC/BMT PATIENTS | 1,79,74,867 | | 3,24,00,000 | |
| Less: Grant Utilised for Plan Cancer Registry | | | (28,714) | |
| Less: Grant Utilised for Captial Expenditure | 3,77,11,93,225 | | 3,92,36,87,184 | |
| Balance | - | | 4,51,00,000 | |
| Total | | - | | 4,51,00,000 |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER.

**SCHEDULE 1-B - WOMEN AND CHILDREN WELFARE GRANT**

in ₹

| PARTICULARS | TMH & ACTREC | VARANASI | VIZAG | SANGRUR | TOTAL |
|---|---|---|---|---|---|
| Balance at the beginning of the Year * | 42,83,233 | 25,00,000 | 5,65,950 | 14,98,119 | 88,47,302 |
| Add: Grant Received During the year | | | | | - |
| Total | 42,83,233 | 25,00,000 | 5,65,950 | 14,98,119 | 88,47,302 |
| Less: Grant Utilised for Women and Children Welfare | | | | | - |
| Balance | 42,83,233 | 25,00,000 | 5,65,950 | 14,98,119 | 88,47,302 |
| Less: Grant Utilised for Revenue Expenditure | | | | | |
| Total | **62,00,195** | **25,00,000** | **5,47,465** | **36,74,330** | **1,29,21,990** |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

**SCHEDULE 2- EARMARKED / ENDOWMENT FUND**

In ₹

| PARTICULARS | As at 31.03.2021 | | | | | | | As at 31.03.2020 | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EARMARKED / ENDOWMENT FUND | SCIENCE & RESEARCH FUND | SAMJAL MISTRY FUND | DONATION | INTEREST ON PATIENT DEPOSITS | PROJECTS | WORKSHOP | TOTAL | SCIENCE & RESEARCH FUND | SAMJAL MISTRY FUND | DONATION | PROJECTS | WORKSHOP | TOTAL |
| A. | | | | | | | | | | | | | |
| Balance at the beginning of the Year | 25,71,50,875 | 1,84,04,843 | 1,80,74,97,315 | | 76,23,72,020 | 5,10,67,206 | 2,89,64,92,857 | 24,14,94,150 | 1,84,04,843 | 1,40,05,52,617 | 67,86,24,389 | 5,62,42,388 | 2,39,53,18,387 |
| Addition during the year | | | 1,59,81,51,165 | 6,45,25,177 | 62,95,28,062 | 4,39,33,808 | 2,33,61,38,211 | | | 1,21,85,34,217 | 52,25,81,397 | 8,04,12,315 | 1,82,15,27,929 |
| Re-grouping | | | | | | | - | | | | | | - |
| Interest on Saving / Bank FD received | 40,98,438 | 12,44,550 | 6,05,13,650 | | 3,22,03,825 | | 10,46,60,463 | 1,56,50,725 | 11,66,165 | 95,92,887 | 3,89,67,556 | | 6,53,82,633 |
| Dividend | | 1,401 | | | | | 1,401 | | 9,118 | | | | 9,118 |
| TDS Projects & Others | | | | | | | - | | | | 33,53,600 | | 33,53,600 |
| Total (A) | 26,18,49,313 | 1,96,50,794 | 3,47,21,62,130 | 6,45,25,177 | 1,42,41,04,907 | 9,50,01,014 | 5,33,72,92,934 | 25,71,50,875 | 1,95,80,126 | 2,62,86,79,021 | 1,24,35,26,942 | 13,66,54,703 | 4,28,55,91,667 |
| B. Utilisation / Expenditure towards objectives of fund | | | | | | | | | | | | | |
| Revenue Expenditure | | 53,736 | 83,28,97,510 | 2,06,40,910 | 40,74,65,882 | 4,31,03,758 | 1,30,41,61,796 | | | 73,67,53,177 | 47,02,90,738 | 8,48,60,495 | 1,29,79,13,409 |
| Capital Expenditure | | | 34,51,91,462 | | 3,35,51,885 | - | 37,87,43,347 | | | 8,44,28,529 | 48,63,585 | 7,18,003 | 9,00,10,117 |
| Transfer to Samjal Scholarship Account | | 6,22,976 | | | | | 6,22,976 | | 5,87,642 | | | | 5,87,642 |
| Transfer to Samjal Patient welfare | | 6,22,975 | | | | | 6,22,975 | | 5,87,641 | | | | 5,87,641 |
| Total (B) | - | 12,99,687 | 1,17,80,88,972 | 2,06,40,909 | 44,10,17,767 | 4,31,03,758 | 1,68,41,51,094 | - | 11,75,283 | 82,11,81,706 | 48,11,54,323 | 8,55,87,498 | 1,38,90,98,809 |
| Closing Balance at the end of the year (A-B) | 26,18,49,313 | 1,83,51,107 | 2,29,40,73,158 | 4,38,84,268 | 98,30,86,739 | 5,18,97,256 | 3,65,31,41,842 | 25,71,50,875 | 1,84,04,843 | 1,80,74,97,315 | 76,23,72,020 | 5,10,67,206 | 2,89,64,92,858 |
| | | | | | | | | | | | | | |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

**SCHEDULE 3 - ACADEMIC FUND**

in ₹

| PARTICULARS | As at 31.03.2021 | As at 31.03.2020 |
|---|---|---|
| Opening Balance | 15,23,98,767 | 13,52,35,172 |
| **Add** :- Addition During the year | 5,04,92,185 | 7,63,62,202 |
| | **20,28,90,952** | **21,15,97,374** |
| **Less** : Deduction During the year | 1,75,73,246 | 5,91,98,607 |
| Total | 18,53,17,706 | 15,23,98,767 |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

### SCHEDULE 4 - CURRENT LIABILITIES AND PROVISIONS

in ₹

| PARTICULARS | | As at 31.03.2021 | | As at 31.03.2020 |
|---|---|---|---|---|
| **A) CURRENT LIABILITES & DEPOSITS** | | | | |
| **Deposits** | | | | |
| - From Student | 2,37,22,169 | | 2,51,11,956 | |
| - From Patient | 2,55,60,91,849 | | 2,49,61,17,945 | |
| - From Suppliers & Contract | 20,53,33,548 | 2,78,51,47,566 | 21,89,37,165 | 2,74,01,67,066 |
| **Other Current Liabilities** | | | | |
| Undisbursed and Unclaimed Salaries | | - | | 17,53,766 |
| New pension scheme liability | | 6,68,198 | | 81,64,103 |
| Sundry Creditors-Capital | | 18,12,66,303 | | 16,68,77,067 |
| Other Liabilities | | 42,35,27,553 | | 27,95,92,278 |
| Book OD | | 20,69,95,029 | | 28,20,07,443 |
| Inter Unit Adjustment | | 55,59,76,132 | | 25,56,20,317 |
| Statutory Liabilities | | 2,06,85,669 | | 1,67,32,093 |
| Outstanding Expenses | | | | |
| - Salary | 66,74,45,166 | | 63,07,34,430 | |
| - Operational Expenses | 1,04,97,14,443 | 1,71,71,59,609 | 1,27,58,68,786 | 1,90,66,03,216 |
| Unutilised Grant from Govt of India c/f* | | | | |
| - Recurring Grant | 41,47,000 | | 32,78,00,000 | |
| - Women & Children Welefare Fund | 1,29,21,990 | | 88,47,302 | |
| - Non Recurring Grant | - | 1,70,68,990 | 4,51,00,000 | 38,17,47,302 |
| **TOTAL (A)** | | **5,90,84,95,050** | | **6,03,92,64,651** |
| **B) PROVISIONS( for retirement benefits of employee)** | | | | |
| Gratuity | | | | |
| a) Current | 23,63,14,016 | | 21,87,42,085 | |
| b) Non current | 1,42,37,62,392 | 1,66,00,76,408 | 1,39,17,60,178 | 1,61,05,02,263 |
| Leave Encashment | | | | |
| a) Current | 24,75,46,854 | | 22,76,59,790 | |
| b) Non current | 1,48,17,48,483 | 1,72,92,95,337 | 1,37,06,38,719 | 1,59,82,98,509 |
| Pension | | | | |
| a) Current | 53,38,69,585 | | 50,03,38,571 | |
| b) Non current | 14,35,33,37,450 | 14,88,72,07,035 | 13,91,44,41,269 | 14,41,47,79,840 |
| **TOTAL (B)** | | **18,27,65,78,780** | | **17,62,35,80,612** |
| TOTAL (A+B) | | 24,18,50,73,830 | | 23,66,28,45,263 |

# TATA MEMORIAL CENTRE

## Schedule 5 - FIXED ASSETS

in ₹

| DESCRIPTION | GROSS BLOCK | | | | DEPRECIATION | | | | | | NET BLOCK | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Cost / Valuation as at the beginning of the year (01/04/2020) | Total Additions / adjustments during the year | Deletions / Ajustment | Cost / Valuation at the end of the year (31/03/2021) | As at the beginning of the year (01/04/2020) | Depreciation on the opening balance | Depreciation on Additions during the year | Total Depreciation during the year | On Deletion / Adjustment | Total up to the year end (31/03/2021) | As on the Current year-Ended 31/03/2021 | As at the Previous year-Ended 31/03/2020 |
| **A. FIXED ASSETS :** | | | | | | | | | | | | |
| 1. LAND | | | | | | | | | | | | |
| a) Freehold | 1,97,608 | | | 1,97,608 | - | | | - | | - | 1,97,608 | 1,97,608 |
| 2. BUILDINGS : | | | | | | | | | | | | |
| a) On Freehold Land | 1,87,36,49,979 | 43,21,299 | - | 1,87,79,71,278 | 31,34,93,705 | 3,05,40,405 | 86,468 | 3,06,26,963 | - | 34,81,20,667 | 1,52,98,50,611 | 1,55,61,56,274 |
| 3. PLANT MACHINERY & EQUIPMENT | 7,20,75,11,448 | 36,25,00,426 | 3,72,26,463 | 7,93,27,85,410 | 3,43,12,29,247 | 41,28,01,149 | 2,48,14,383 | 43,76,15,532 | 3,45,57,539 | 3,83,43,07,440 | 4,09,84,77,971 | 3,77,62,82,201 |
| 4. VEHICLES | 5,40,53,189 | 43,86,127 | 12,39,748 | 5,71,99,568 | 3,25,40,298 | 35,07,326 | 65,868 | 35,73,194 | 10,37,537 | 3,50,75,955 | 2,21,23,593 | 2,15,12,871 |
| 5. FURNITURE, FIXTURES | 25,80,23,757 | 3,66,93,211 | 4,44,695 | 29,45,72,273 | 16,31,10,285 | 1,54,98,645 | 21,10,057 | 1,76,08,702 | 4,46,573 | 18,02,74,414 | 11,42,97,859 | 9,38,13,472 |
| 6. OFFICE EQUIPMENT | 7,08,86,805 | 38,52,568 | 3,72,060 | 7,43,61,313 | 2,59,13,709 | 31,64,486 | 1,12,725 | 32,77,211 | 3,09,286 | 2,88,81,635 | 4,54,79,678 | 4,49,67,096 |
| 7. COMPUTER/ PERIPHERALS | 68,78,20,636 | 7,42,99,799 | 7,16,985 | 76,14,03,444 | 48,56,82,574 | 5,99,38,145 | 99,55,424 | 6,98,93,569 | 7,16,968 | 55,48,59,175 | 20,65,44,269 | 20,21,38,056 |
| **TOTAL (A)** | 10,15,20,37,396 | 88,54,53,430 | 3,99,99,951 | 10,99,84,90,873 | 4,45,59,69,817 | 52,54,50,246 | 3,71,44,925 | 56,25,95,171 | 3,70,45,701 | 4,98,15,19,286 | 6,01,69,71,589 | 5,69,70,67,578 |
| CWIP | 8,95,07,84,623 | 2,49,63,83,702 | 37,13,53,216 | 11,07,58,15,109 | | | | | | | 11,07,58,15,109 | 8,95,07,84,623 |
| LESS: PROVISION FOR DOUBTFUL CAPITAL ADV (LAND) | 8,02,370 | | | 8,02,370 | | | | | | | 8,02,370 | 8,02,370 |
| **NET CAPITAL WIP (B)** | 8,94,99,82,253 | | | 11,07,50,12,739 | | | | | | | 11,07,50,12,739 | 8,94,99,82,253 |
| TOTAL (A + B) | 19,10,20,19,649 | 3,38,18,37,133 | 41,13,53,167 | 22,07,35,03,614 | 4,45,59,69,817 | 52,54,50,246 | 3,71,44,925 | 56,25,95,171 | 3,70,45,701 | 4,98,15,19,286 | 17,09,19,84,328 | 14,64,70,49,831 |
| PREVIOUS YEAR (TMC) | 16,07,10,75,409 | 3,24,77,54,239 | 21,17,90,098 | 19,10,20,19,649 | 4,10,84,53,227 | 47,10,21,892 | 4,42,89,692 | 51,53,11,584 | 16,83,99,983 | 4,45,59,69,817 | 14,64,70,49,831 | 11,96,26,22,240 |

Note: Capital work in progress includes freehold land amounting to Rs 802370 (previous year Rs 802370) which is disputed and hence provided as doubtful from the financial year 2009-10

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

### SCHEDULE 6 - CURRENT ASSETS, LOANS AND ADVANCES

in ₹

| PARTICULARS | As at 31.03.2021 | | As at 31.03.2020 | |
|---|---|---|---|---|
| **A. CURRENT ASSETS** | | | | |
| **1. Inventories** | | | | |
| Stock of Drugs, Medical and Surgical Goods | 44,38,77,849 | | 43,48,60,393 | |
| Stores & stationery | 63,31,556 | **45,02,09,405** | 99,59,590 | **44,48,19,983** |
| **2. Sundry Debtors** | | | | |
| a) Outstanding more than six months | | | | |
| Considered Good | 22,69,81,121 | | 28,01,69,126 | |
| Considered Doubtful | 2,78,31,688 | | 2,41,37,359 | |
| | 25,48,12,809 | | 30,43,06,485 | |
| Outstanding less than six months | | | | |
| Considered Good | 36,61,44,678 | | 63,07,85,077 | |
| Considered Doubtful | - | | - | |
| | 62,09,57,487 | | 93,50,91,562 | |
| b) Less: Provision for Doubtful Debts | 2,78,31,688 | **59,31,25,799** | 2,41,37,359 | **91,09,54,203** |
| **3. Cash Balances** | | | | |
| Cash in Hand | 34,48,339 | | 4,41,885 | |
| Cheques on Hand | | | 39,49,816 | |
| Franking Balance | 42,756 | **34,91,095** | 42,756 | **44,34,457** |
| **4. Bank Balances** | | | | |
| With Scheduled Banks : | | | | |
| - Current Accounts | 45,29,78,367 | | 89,72,78,264 | |
| - Fixed Deposit Accounts | 7,80,93,21,475 | | 6,01,35,39,359 | |
| - Margin Money Deposit Accounts | 27,91,64,198 | | 1,01,54,01,477 | |
| - Fixed Deposits Projects | 69,84,41,664 | | 59,29,12,268 | |
| - On Savings Accounts | 68,01,941 | **9,24,67,07,644** | 2,66,45,469 | **8,54,57,76,837** |
| **TOTAL (A)** | | **10,29,35,33,944** | | **9,90,59,85,480** |

contd.....

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

### SCHEDULE 6 - CURRENT ASSETS, LOANS AND ADVANCES

in ₹

| PARTICULARS | As at 31.03.2020 | | As at 31.03.2019 | |
|---|---|---|---|---|
| **B. LOANS AND ADVANCES** | | | | |
| **1. Advances recoverable in cash or in kind or for value to be received (unsecured, considered good)** | | | | |
| Considered Good | 3,51,00,474 | | 1,17,72,348 | |
| Considered Doubtful | - | | - | |
| | 3,51,00,474 | | 1,17,72,348 | |
| Less: Provision for Doubtful Advances | - | **3,51,00,474** | - | **1,17,72,348** |
| b) Prepaid expenses | | **2,89,96,131** | | **1,57,34,423** |
| c) Other Deposits | | **5,06,61,142** | | **5,16,09,142** |
| **2. Loans & Advances to staff** | | | | |
| Interest Bearing Advances | **1,02,21,360** | | 91,69,232 | |
| Non Interest Bearing Advances | **24,85,373** | **1,27,06,733** | 14,49,261 | **1,06,18,493** |
| **3. Interest Accured** | | | | |
| Interest Accured on Fixed Deposits | **13,96,33,588** | | **15,91,98,901** | |
| Interest Accured on Corpus Deposits | **50,73,340** | | **1,68,97,312** | |
| Interest Accured on Sam Jal Deposits | **5,64,820** | **14,52,71,748** | **6,56,091** | **17,67,52,304** |
| **4. Interest Accured but not due** | | **79,44,016** | | **84,90,297** |
| **5. Tax Deducted at Source** | | **4,76,88,533** | | **6,84,02,416** |
| **6. Inter Unit Adjustment accounts** | | - | | **6,57,98,588** |
| **TOTAL (B)** | | **32,83,68,777** | | **40,91,78,011** |
| TOTAL (A+B) | | 10,62,19,02,721 | | 10,31,51,63,491 |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER.

**SCHEDULE 7 - RECURRING GRANT**

in ₹

| PARTICULARS | As at 31.03.2021 | | As at 31.03.2020 | |
|---|---|---|---|---|
| Balance at the beginning of the Year | 32,78,00,000 | | - | |
| Add: Grant Received During the year | 5,27,91,00,000 | | 4,39,60,00,000 | |
| **Total** | **5,60,69,00,000** | | **4,39,60,00,000** | |
| Less: Grant Utilised for Captial Expenditure (A) | | | 1,29,68,674 | |
| **Balance** | **5,60,69,00,000** | | **4,38,30,31,326** | |
| Less: Grant Utilised for Revenue Expenditure (B) | 5,60,27,53,000 | | 4,05,52,31,326 | |
| | | | | |
| Unspent Balance c/f | | 41,47,000 | | 32,78,00,000 |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

### SCHEDULE 8 - INTEREST INCOME

in ₹

| PARTICULARS | | Year Ended 31.03.2021 | | Year Ended 31.03.2020 |
|---|---|---|---|---|
| **Interest : (gross)** | | | | |
| (includes tax deducted at source) | | | | |
| **from banks :** | | | | |
| on fixed deposits/ margin money deposits | 22,36,08,858 | | 42,47,22,396 | |
| on saving accounts & Others | 27,79,293 | | 3,37,255 | |
| | | **22,63,88,151** | | **42,50,59,651** |
| **from others :** | | | | |
| on Vehicle Advances | 879 | | 9,020 | |
| on House Building Advances | 8,28,854 | | 10,30,432 | |
| on Computer Advances | 1,504 | | 10,318 | |
| | | **8,31,237** | | **10,49,770** |
| **Interest accrued but not Due on staff Advances** | | **9,66,302** | | **7,76,622** |
| | | - | | - |
| Total | | 22,81,85,690 | | 42,68,86,043 |

# TATA MEMORIAL CENTRE

**TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER.**

**SCHEDULE 9 - OTHER INCOME**

In ₹

| PARTICULARS | Year Ended 31.03.2021 | Year Ended 31.03.2020 |
|---|---|---|
| Miscellaneous Receipts | 6,73,72,540 | 7,29,75,081 |
| Animal House Receipts | 59,27,060 | 66,72,575 |
| Project Overheads | 45,00,024 | 85,77,008 |
| Effect of exchange fluctuation (net) | 10,74,294 | (59,96,856) |
| Mobilisation Interest | 55,00,881 | 1,14,88,810 |
| TOTAL | 8,43,74,799 | 9,37,16,618 |

# TATA MEMORIAL CENTRE

## TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER

### SCHEDULE 10 - CONSUMPTION OF DRUGS & SURGICAL GOODS

in ₹

| PARTICULARS | Year Ended 31.03.2021 | Year Ended 31.03.2020 |
|---|---|---|
| Opening stock of Drugs / Surgical goods | 42,78,16,066 | 35,61,57,710 |
| **Add:** Purchases | 2,74,06,50,858 | 3,97,03,05,786 |
| **Less:** Closing stock of Drugs / Surgical goods | 43,69,74,259 | 42,78,16,066 |
| **Less:** Return/ Rejected / Expired Drugs / Surgical goods | 3,09,61,124 | 2,48,22,569 |
| TOTAL | 2,70,05,31,541 | 3,87,38,24,861 |

# TATA MEMORIAL CENTRE

**TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER.**

**SCHEDULE 11 - STAFF COST / SALARIES**

in ₹

| PARTICULARS | Year Ended 31.03.2021 | Year Ended 31.03.2020 |
|---|---|---|
| a) Salaries and Wages | 2,54,39,70,456 | 2,46,73,19,315 |
| b) Allowances and Bonus | 2,04,77,30,594 | 2,24,15,19,364 |
| bi) Outsourse Salary | 88,28,53,987 | 74,47,29,032 |
| c) Expenses on Employee's Retirement and Terminal Benefits | 17,34,66,999 | 15,28,86,682 |
| d) Pension scheme | 63,79,97,001 | 57,02,54,235 |
| e) Fellowships | 62,67,00,234 | 55,52,10,787 |
| TOTAL | 6,91,27,19,271 | 6,73,19,19,415 |

# TATA MEMORIAL CENTRE

**TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER**

**SCHEDULE 12 - OTHER ADMINISTRATIVE EXPENSES**

in ₹

| PARTICULARS | | Year Ended 31.03.2021 | Year Ended 31.03.2020 |
|---|---|---|---|
| a) Linen and Laundry | | 6,81,74,596 | 5,99,45,245 |
| b) Library Expenses | | 14,78,60,171 | 6,71,23,815 |
| c) Electricity | | 41,71,74,551 | 41,62,48,401 |
| d) Water Charges | | 1,49,81,606 | 1,36,79,683 |
| e) Repairs and Maintenance | | 45,30,37,823 | 41,06,98,180 |
| f) Animal House Expenses | | 35,92,632 | 42,07,518 |
| g) Rates and Taxes | | 5,82,94,756 | 2,44,00,351 |
| h) Insurance | | 1,43,16,923 | 1,51,80,660 |
| i) Minor Equipments and Replacement of Capital Equipments | | 53,41,320 | 7,45,349 |
| j) Postage, Telephone and Communication Charges | | 1,26,64,495 | 70,67,298 |
| k) Printing and Stationery | | 4,14,47,290 | 3,78,68,341 |
| l) Travelling and Conveyance Expenses | | 3,32,49,426 | 5,36,77,590 |
| m) Intra Mural Research Expenses | | 19,20,579 | 1,86,68,630 |
| n) Cancer Registry Program Expenses | | 20,48,14,811 | 7,26,38,845 |
| o) Auditors Remuneration | | | |
| Audit fees | 1,02,500 | | 3,35,000 |
| GST | 41,400 | 1,43,900 | 81,900 |
| p) Symposium and Training | | 13,14,815 | 18,04,179 |
| q) Professional Charges | | 5,37,964 | 33,00,922 |
| r) Advertisement Expenses | | 2,32,51,349 | 1,53,58,047 |
| w Provision for Doubtful Debts | | 36,94,329 | 38,59,549 |
| t) Hostel maintenance expenses | | 1,69,80,121 | 1,50,74,231 |
| u) Miscellaneous Expenses | | 2,88,71,930 | 5,47,94,667 |
| v) Covid Expenses | | 8,54,58,287 | |
| w Bad debts written off | | - | 59,248 |
| x Loss / (Profit) on sale of Assets | | 14,93,014 | 51,80,480 |
| TOTAL | | 1,63,86,16,687 | 1,30,19,98,129 |

## TATA MEMORIAL CENTRE
### [TATA MEMORIAL HOSPITAL AND ADVANCED CENTRE FOR TREATMENT, RESEARCH AND EDUCATION IN CANCER]

The Tata Memorial Centre (TMC) Comprising of the Tata Memorial Hospital (TMH) and the Advance Centre for Treatment, Research& Education in Cancer (ACTREC) functions as a grant- in- aid Institute under the administrative control of the Department of Atomic Energy, Government of India and recognized as the national cancer centre with a mandate for Service, Education and Research in Cancer. Four new hospitals in Visakhapatnam, Andhra Pradesh and Mullanpur District Punjab, two in Varanasi as HBCH and MPMMMCH. The satellite centre in Sangrur is functional. The hospital in Visakhapatnam is providing OPD and day care services. The Centre is registered under the Societies Registration Act (1860) and the Bombay Public Trust Act (1950).

### SCHEDULE 13 : SIGNIFICANT ACCOUNTING POLICIES

1. **Basis of Preparation of Financial Statements**
   The financial statements are prepared on historical cost convention, unless otherwise specifically stated, on the accrual basis of accounting and comply with the framework and format laid down by the Controller General of Accounts, Government of India and applicable accounting standards issued by the Institute of Chartered Accountants of India (ICAI) to the extent applicable and in the manner so required.

   Revenues and costs are accrued, that is, recognized as they are earned or incurred and recorded in the financial statements of the periods to which they relate. The Centre follows accrual basis of accounting, except for Grants, Donations, Workshops /Projects and Commuted Pensions (in case of existing pensioners), which are accounted for on cash basis

2. **Use of Estimates**
   The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amount of assets and liabilities as of the Balance Sheet, reported amounts of revenues and expenses for the year ended and disclosure of contingent liabilities as of the balance sheet date. The estimates and assumptions used in these financial statements are based upon management's evaluation of the relevant facts and circumstances as on the date of the financial statements. Actual results may differ from those estimates. Any revision to accounting estimates is recognized prospectively.

3. **Revenue Recognition**
   i) Hospital income from services rendered to patients is recognized as and when the bills for the services are generated.

   ii) Interest income is recognized on a time proportion basis taking into account the amount invested and the rate of interest.

   iii) Interest on employee advances are recognized in the year on accrual basis.
   iv) Other Revenue items are recognized only when it is reasonably certain that the ultimate collection will be made. Deposits from students in excess of 3 years and

deposits from suppliers in excess of 4 years written back are recognized under miscellaneous income.

v) Interest earned on general fixed deposit pertaining to donation allocated as per average interest rate among respective donation.

**4. Fixed Assets and Depreciation**

i) Fixed assets are capitalized at acquisition cost (net of duty / tax credits availed, if any), including directly attributable costs such as freight, insurance and specific installation charges for bringing the assets to working condition for use.

ii) Expenditure relating to existing fixed assets is added to the cost of the assets, where it increases the performance / life of the asset as assessed earlier.

iii) Fixed Assets are stated at cost less accumulated depreciation.

iv) Fixed assets purchased on non-government funded projects and from donations are transferred to the assets of the Centre at purchase price.

v) Fixed assets are eliminated from financial statements only on disposal.

Depreciation on fixed assets is provided under straight line method based on useful life of the asset determined by the management at the following rates :

| Asset | Rate of depreciation |
|---|---|
| Buildings | 1.63% |
| Electrical & Gas Installation | 4.75% |
| Plant & Machinery | 7.07% |
| Furniture and Fixtures | 9.50% |
| Office Equipment | 4.75% |
| Computers and peripherals | 16.21% |
| Vehicles - Buses | 11.31% |
| - Car, Jeep | 9.50% |

i) Depreciation on assets purchased during the year is provided from the date of its purchase / installation

iii) Individual assets costing less than Rs.5,000/- are expensed out in the year of purchase / WDV.

iii) Where any asset has been sold, the depreciation on such asset is calculated on pro-rata basis up to the date, on which such asset has been sold.

**5. Inventories**

i) Inventories consist of Drugs and Surgical meant for sale purpose and are valued at lower of cost or Net Realisable Value. Cost is determined on first-in-first-out basis.

ii) Stock of consumables, stationery are valued at cost

ii) Stock of linen, laundry, cutlery and crockery, are treated as consumed as and when purchased

6. **Government Grant**

i) Recurring and Non-recurring grant related to the revenue are recognized on systematic basis in the income and expenditure account over the period, necessary to match them with the related costs which they are intended to compensate.

ii) Non-recurring grant to the extent utilised for capital expenditure are transferred to Capital Fund. Unutilised grants are carried forward as Current Liabilities in the Balance Sheet.

7. **Donation**

Donations in kind received prior to 1st April, 2003 are included under 'Earmarked / Endowment Funds' at comparable purchase price. With effect from 1st April, 2003, donations received in kind are being recorded in the books at nominal value. Donations are received for patient care and cancer research. Assets purchased on donations are treated as assets of the Centre and capitalised accordingly. Donation includes amount received as Corporate Social Responsibility (CSR).

8. **Foreign Exchange Transactions**

a. Transactions in foreign currencies are recorded at the exchange rates prevailing on the transaction dates.
b. Monetary items denominated in foreign currencies remaining unsettled at the year-end are translated at the year-end exchange rates.
c. All exchange gains / losses on settlement / translation, are recognized in the Income & Expenditure account

9. **Employee Benefits**

**Short Term Employee Benefits:**

All employee benefits wholly payable within twelve months of rendering the service are classified as short term employee benefits. Benefits such as salaries, wages, bonus, etc are recognized in the period in which the employee renders the related service.

**Post Employment Benefits:**

i) **Defined Contribution Plans:**

Employee benefits in the form of Contributory Provident Fund and New Pension Scheme (for employees joined from 1st January, 2004) are considered as defined contribution plans. The contribution paid / payable under the scheme is recognized in the period in which the employee renders the related service.

ii) **Defined Benefit Plans:**

Retirement benefits in the form of gratuity to eligible employees, leave encashment and pension scheme (other than employees covered in (i) above) are considered as defined benefit plans. The present value of the obligation under such defined benefit plans is determined based on actuarial valuation using the

Projected Unit Credit Method, which recognizes each period of service as giving rise to additional unit of employee benefit entitlement and measures each unit separately to build up the final obligation.

The obligation is measured using at the present value of the estimated future cash flows. The discount rates used for determining the present value of the obligation under defined benefit plans, is based on the market yields on Government securities as at the Balance Sheet date, having maturity periods approximating to the terms of related obligations.

**10. Provision, Contingent Liabilities and Contingent Assets**

a. Provisions are recognized for liabilities that can be measured only by using a substantial degree of estimation, if

1. The Centre has a present obligation as a result of past event.
2. A probable outflow of resources is expected to settle the obligation.
3. The amount of obligation can be reliably estimated.

b. Contingent liability is disclosed in the case of :

1. A present obligation arising from past event, when it is not probable that an outflow of resources will be required to settle the obligation.
2. A possible obligation, unless the probability of outflow of resources is remote.

c. Provisions, Contingent Liabilities are reviewed at each Balance Sheet date.

d. Provision for doubtful debts has been made in respect of debtors which remains outstanding for more than 3 years.

**11. Events occurring After the Balance Sheet Date**

Where material, events occurring after the date of the Balance Sheet are considered upto the date of approval of accounts by the members of the Governing Council.

**12. Academic Fund**

A percentage as prescribed by the Governing Council of Tata Memorial Centre is transferred from the Hospital Income to a separate fund named as the "Academic Fund". The expenditure incurred towards fulfillment of the objectives is debited to the said fund.

**13. Science & Research Fund**

The Science & Research Fund / Corpus is created in 2000 with the purpose of utilising the interest in the Fund for (i) Support of preventive oncology activities in the country (ii) Support for attending international conferences and training programmes on cancer related topics and (iii) Any other purpose with the approval of the Committee.

**14. Samjal Mistry Fund**

The fund is created as per the will of Late Sam Jal Mistry and Late Alice Sam Mistry in 1999. As per the will, the interest and dividend on shares generated from the fund will be utilised equally for treatment to poor cancer patients and scholarship to PG students.

## SCHEDULES FORMING PART OF ACCOUNTS

## SCHEDULE 14: NOTES ON ACCOUNTS

1. Contingent liabilities not provided for in respect of :
   a. LC's outstanding as on 31st march, 2021 is Rs.27,91,64,198/-
   b. Claims against the hospital made by patients are not acknowledged as debts, since the same are not quantifiable.

2. Estimated amount of contracts remaining to be executed on capital account is not ascertained.

3. Sundry debtors, and creditors' balances, and balances of certain liabilities are subject to confirmation, reconciliation and consequent adjustments, if any.

4. Fixed Deposits of the Centre includes an amount of Rs. 27,91,64,198 /- (Pr Year Rs. 101,54,01,477/- which represents Earmarked Funds kept aside for the capital commitments.

5. The Centre is covered by a system of internal audit conducted by the Department of Atomic Energy and Indian Audit and Accounts Department. However, during the year the said audit was not conducted.

6. The Centre has filed a writ petition in the Honorable High Court Bombay for non-applicability of Bombay Labour Fund Act, 1956 in the year 2001-02, the final verdict for which is still pending. Each year the centre recovers the LWF amount from employees and also contributes towards the said liability amounting to Rs.1,19,93,416/- (incl interest of Rs.6,41,734/-) respectively which is disclosed under current liabilities in the financial statement. The centre has also kept as deposit Rs. 5, 50,000/- with Hon'ble Bombay High Court.

7. "Unclaimed NPS A/c" of Rs. 12, 87, 463/- is due for more than 3 years and is being shown under "Other Current Liabilities". As and when the claims will be made by the employees then the payments will be made from this account head.

8. The disclosures pursuant to Accounting Standard 15 (Revised) on "Employee Benefits" are as follows:

| (in Rs.) |
|---|
| **Defined Contribution Plan :** |
| Contribution to Defined Contribution Plan, recognised as an expense and included in "Staff and Welfare" – Schedule 11 in the Income and Expenditure Account are as under :<br>- Employers contribution to Provident Fund – Rs.28,29,457/-<br><br>- Employer's Contribution to New Pension Scheme – Rs 17,32,36,246/- |

| | | | Gratuity | |
|---|---|---|---|---|
| | | | 31-3-2021 | 31-3-2020 |
| I | **Change in obligation during the year** | | | |
| | 1 | Liability at the beginning of the year | 161,05,02,263 | 140,67,50,157 |
| | 2 | Interest Cost(gratuity report as15r table 3) | 108,801,607 | 103,275,799 |
| | 3 | Current Service Cost | 75,703,657 | 56,969,604 |
| | 4 | Past Service Cost | 0 | 0 |
| | 5 | Benefit Paid | (108,827,189) | (95,258,170) |
| | 6 | Actuarial (Gain)/Loss | (26,103,930) | 138,764,873 |
| | 7 | Liability at the end of the year | 166,00,76,408 | 161,05,02,263 |
| | | | | |
| II | **Net asset / (liability) recognised in the Balance Sheet** | | | |
| | 1 | Liability at the end of the year | 166,00,76,408 | 1,610,502,263 |
| | 2 | Plan assets at the end of the year | 0 | 0 |
| | 3 | Liability recognised in the Balance sheet | 166,00,76,408 | 1,610,502,263 |
| | | | | |
| III | **Expenses recognized in the Income and Expenditure account** | | | |
| | 1 | Current Service Cost | 75,703,657 | 56,969,604 |
| | 2 | Interest Cost | 108,801,607 | 103,275,799 |
| | 3 | Expected Return on Plan Assets | | |
| | 4 | Actuarial (Gain)/Loss | (26,103,930) | 138,764,873 |
| | 5 | Past service cost | 0 | 0 |
| | 6 | Total expenses recognised in the Income and Expenditure Account | 158,401,334 | 299,010,276 |
| | | | | |
| IV | **Principal actuarial assumptions at the Balance Sheet date** | | | |
| | 1 | Discount rate at | 6.80% | 6.90% |
| | 2 | Expected return on plan assets | 0.00% | 0.00% |
| | 3 | Salary escalation | 7.00% | 7.00% |
| **General description of the defined benefit plan :** | | | | |
| 1 | The Centre operates a gratuity scheme, which is an unfunded scheme for qualifying employees. The Scheme provides for lump sum payment to employees on retirement, death while in employment or termination of employment of an amount equivalent to 15 days salary for every completed year of service or part thereof in excess of six months, provided the employee has completed five years in service.<br><br>Vide Order No. 7/5/2012-P&PW(F)/B dated 26th August, 2016, the Ministry of Finance has extended the benefits of 'Retirement Gratuity and Death Gratuity' to the Central Government employees covered by new | | | |

| | |
|---|---|
| | Defined Contribution Pension System on the same terms and conditions, as are applicable to employees covered by Central Civil Service (Pension) Rule,1972. |
| 2 | The Centre operates a leave encashment scheme, which is an unfunded scheme. The present value of obligation under this scheme is based on an actuarial valuation, using the Projected Unit Credit Method, which recognizes each period of service as giving rise to additional unit of employee benefit entitlement and measures each unit separately to build up the final obligation. Based on the actuarial valuation, the liability as at 31st March, 2021 works out to Rs. 172,92,95,337/-. |
| 3 | The Centre operates a Pension scheme which is an unfunded scheme for employees, who have joined prior to 1st January, 2004. The benefit is payable at the time of superannuation or voluntary retirement after completion of minimum of 20 years service. Based on the actuarial valuation, the liability as at 31st March, 2021 works out to Rs. 1488,72,07,035/-. |

9. Unknown/Unreconciled inward remittances outstanding as on 31st March, 2021, is Rs.17,93,39,835/- which are under identification/reconciliation.

10. The Centre has projects under development at Varanasi, Vizag and Sangrur. The expenses incurred on behalf of them are shown as Inter Unit Adjustment account under Current Assets. The balance shall be transferred to the respective locations on completion of the project.

11. As per AS-12 of ICAI on Presentation of Grants Related to Specific Fixed Assets, grants related to depreciable assets are treated as deferred income which is recognised in the profit and loss statement on a systematic and rational basis over the useful life of the asset. Such allocation to income is usually made over the periods and in the proportions in which depreciation on related assets is charged.

    TMC has been accounting the Capital Grant received as liability in the Balance Sheet. The Fixed assets procured from these grants are capitalized and depreciation is being charged in line with the depreciation policy. However, deferred revenue is not recognized and reduced from the Capital Grant to the extent of depreciation claimed on the corresponding fixed assets in the previous years and we are under the process of verifying the details and would be accounting those entries in the next year. Currently the said amount is not ascertainable and hence the impact of the same on the Revenue account is not known.

1. Figures for the previous year have been regrouped / reclassified wherever necessary to make them comparable with those of the present year.

For Batliboi & Purohit
Chartered Accountants
ICAI Registration No. : 101048W

CA Parag Hangekar
Partner
Membership No. 110096
Date:
Place: Mumbai

Mr. Anil Sathe
CAO, TMC

For Tata Memorial Centre

Dr. R.A. Badwe
Director

## ACTION TAKEN REPORT ON AUDITOR'S OBSERVATIONS FOR THE YEAR 2020-21

| Paragraph No of Auditor's Report | Auditor's comments (to be reproduced in full) | Action Taken | Expected month and year for completion of Action |
|---|---|---|---|
| (1) | (2) | (3) | (4) |
| 1 | We have audited the attached Financial Statements of **Tata Memorial Centre (the Centre)** which comprises Balance Sheet as at 31st March, 2021 and the Statement of Income and Expenditure Account, the Statement of Receipts and Payments Account and Notes to the Financial Statements for the year ended on that date including a summary of significant accounting policies and other explanatory information, as required by the Bombay Public Trusts Act, 1950 (the Act). | This is a statement of fact and information. No action required | |
| 2 | In our opinion, the accompanying financial statement give the information required by the Act in the manner so required, we report that:<br>(a) In the case of the Balance Sheet, of the state of affairs of the Centre as at 31st March, 2021.<br>(b) In the case of Income and Expenditure Account, of the Excess of Expenses over Income of the Centre for the year ended on that date. | This is a statement of fact and information. No action required | |
| 3 | We conducted our audit in accordance with the Standard on Auditing (SAs) issued by Institute of Chartered Accountants of India. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements' section of our report. We are independent of the entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained in sufficient and appropriate to provide a basis for our opinion. | This is a statement of fact and information. No action required | |

| | | | |
|---|---|---|---|
| 4 | The trustees are responsible for the preparation and fair presentation of these financial statements in accordance with the aforesaid Accounting Standards generally accepted in India and for such Internal Control as management determines is necessary to enable the preparation of Financial Statements that are free from material misstatements, whether due to fraud or error.<br>In preparing the financial statements, management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the entity or to cease operations, or has realistic alternative but to do so. Those charged with governance are responsible for overseeing the entity's financial reporting process. | This is a statement of fact and information. No action required | |
| 5 | Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Standards on Auditing issued by the Institute of Chartered Accountants of India, will always detect a material misstatement when it exists. Misstatement can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion. | This is a statement of fact and information. No action required | |
| 6 | We have conducted physical verification of stock of Tata Memorials Hospitals and ACTREC. Physical stock verification of units other than Tata Memorial Hospital and ACTREC could not be done due to travelling restriction on account of the COVID-19 Pandemic. | This is a statement of fact and information. No action required | |
| 7 | We refer to Note 9 of schedule 14 Notes to Accounts which state that Unknown/Unreconciled inward remittances outstanding as on 31st March, 2021, is Rs.17,93,39,835/- which are under identification/reconciliation. | This is a statement of fact and information. This is unknown credit and after 3 years will book as income. | We will book in FY 2021-22 |

| | | | |
|---|---|---|---|
| 8 | 1. We refer to Note 9 of schedule 14 Notes to Accounts which state that As per AS-12 of ICAI on Presentation of Grants Related to Specific Fixed Assets, grants related to depreciable assets are treated as deferred income which is recognised in the profit and loss statement on a systematic and rational basis over the useful life of the asset. Such allocation to income is usually made over the periods and in the proportions in which depreciation on related assets is charged.<br><br>TMC has been accounting the Capital Grant received as liability in the Balance Sheet. The Fixed assets procured from these grants are capitalized and depreciation is being charged in line with the depreciation policy. However, deferred revenue is not recognized and reduced from the Capital Grant to the extent of depreciation claimed on the corresponding fixed assets in the previous years and we are under the process of verifying the details and would be accounting those entries in the next year. Currently the said amount is not ascertainable and hence the impact of the same on the Revenue account is not known. | This is a statement of fact and information and deferred income as per AS 12 related to previous year i.e. 2019-20 and we already taken in accounts for this financial account. | We already given effect in FY 2020-21. |

श्री. सूर्यकांत मोहपात्रा
MR. SURYAKANT MOHAPATRA
संयुक्त नियंत्रक (वित्त और लेखा) टी.एम.सी.
JT. CONTROLLER (F & A) TMC
TATA MEMORIAL HOSPITAL,
DR. E. BORGES MARG,
PAREL, MUMBAI - 400 012.

Batliboi & Purohit
CHARTERED ACCOUNTANTS

**Head Office (Mumbai) :** National Insurance Building,
204, Dadabhoy Naoroji Road, Fort, Mumbai - 400 001.
Tel. : 2207 7941 / 2207 4260
E-mail : info@batliboipurohit.com
Website : www.batliboipurohit.com

## INDEPENDENT AUDITORS' REPORT

**To**
**The Chairman,**
**Governing Council of Tata Memorial Centre,**

### Opinion

We have audited the attached Financials Statements of **Tata Memorial Centre (the Centre)** which comprise the Balance Sheet as at 31st March, 2021 and the statement of Income and Expenditure Account, the statement of Receipts and Payments Account and the notes to the Financial Statements for the year ended on the date including a summary of significant accounting policies and other explanatory information, as required by the Bombay Public Trust Act, 1950 (the Act).

In our opinion, the accompanying Financial Statements give the information required by the act in the manner so required and give a true and fair view of the financial position of the Centre:

A) In the case of the Balance Sheet, of the state of affairs of the Centre as at 31st March, 2021.
B) In the case of Income and Expenditure Account, of the Excess of Expense over Income of the Centre for the year ended on that date.

### Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) issued by Institute of chartered Accountants of India. Our responsibilities under those Standards are further described in the Auditors' Responsibilities for the Audit of the Financial Statements section of our report.

We are independent of the entity in accordance with the ethical requirements that are relevant to audit of financial statements, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

### Emphasis of Matter Paragraph

1. We have conducted physical verification of stock of Tata Memorial Hospital and Advanced Centre for Treatment Research and Education in Cancer. Physical Stock Verification of units other than Tata Memorial Hospital and Advanced Centre for Treatment Research and Education in Cancer could not be done due to travelling restriction on account of the Covid - 19 Pandemic.

2. We refer to Note No. 9 of Schedule 14 Notes to Accounts which state that Unknown/Unreconciled inward remittances outstanding as on 31st March, 2021 are at Rs.17,93,39,835/- which are under identification/reconciliation and will be rectified by the Management in the next year.

3. We refer to Note No. 11 of Schedule 14 Notes to Accounts which state that, As per AS-12 of ICAI on Presentation of Grants Related to Specific Fixed Assets, grants related to depreciable assets are treated as deferred income which is recognised in the profit and loss statement on a systematic and rational basis over the useful life of the asset. Such allocation to income is usually made over the periods and in the proportions in which depreciation on related assets is charged.

   The Centre has been accounting the Capital Grant received as liability in the Balance Sheet. The Fixed assets procured from these grants are capitalized and depreciation is being charged in line with the depreciation policy. However, deferred revenue is not recognized and reduced from the Capital Grant to the extent of depreciation claimed on the corresponding fixed assets in the previous years and the Management is under the process of verifying the details and would be accounting those entries in the next year. Currently the said amount is not ascertainable and hence the impact of the same on the Revenue account is not known.

Our opinion is not modified in respect of these matters.

**Management's Responsibility for the Financial Statements**

The Trustees are responsible for the preparation and fair presentation of these financial statements in accordance with the aforesaid accounting standards generally accepted in India and for such internal control as Management determines is necessary to enable the preparation of financial statements that are free from material misstatements, whether due to fraud or error.

In preparing the financial statements, Management is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless management either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so. Those charged with governance are responsible for overseeing the entity's financial reporting process

Batliboi & Purohit
CHARTERED ACCOUNTANTS

**Auditors' Responsibilities for the Audit of the Financial Statements**

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an Auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Standards on auditing issued by the Institute of Chartered Accountants of India, will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**For Batliboi & Purohit**
**Chartered Accountants**
Firm Reg. No.: 101048W

**Parag Hangekar**
**Partner**
**Membership No. 110096**
**UDIN: 21110096AAAADS3245**

**Place: Mumbai**
**Date: August 30, 2021**

## Finance, Simplified

The income of the centre from the patient receipts were reduced to more than 40% during the Covid pandemic. Expenses also mounted as covid protective measures had to be implemented and additional items, though not expensive, had to be purchased in huge quantities. The DAE also had to reduce the amount of grant that it provided to TMC.

The ministrations provided by TMC included those of Service, Education and Research with the bulk of research being carried out at Advanced Centre for Treatment, Research & Education in Cancer (ACTREC) and at the Centre for Cancer Epidemiology (CCE).

It was roughly estimated that the individual percentage expenditure of the above three components of TMC ministrations would approximately be: Service 62%, Education 14%, and, Research 24%. Due to the pandemic, the academic expenses were minimal.

The TMC generated funds from hospital receipts (income from patients), marginal profits from the sale of drugs & consumables, grant from the DAE, and from other sources like fixed deposits, etc.

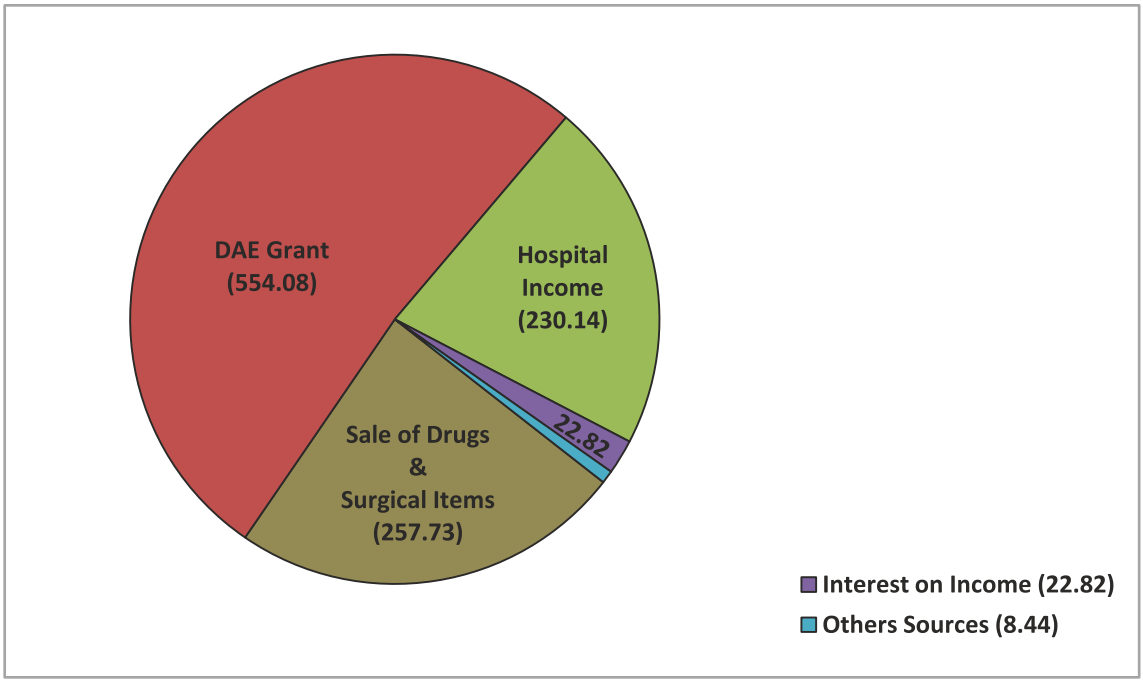
The TMC expenses included the salary of staff, maintenance of the physical assets, the investments in research & education, the cost of drugs & consumables, and other administrative outgoings.

| Tata Memorial Centre's Income (in crore) ≅ INR 1073 | | | | |
|---|---|---|---|---|
| **DAE Grant** | **Income from Patients** | **Sale of drugs & Surgical Items** | **Interest on Income** | **Other sources** |
| **554.08** | **230.14** | **257.73** | **22.82** | **8.44** |

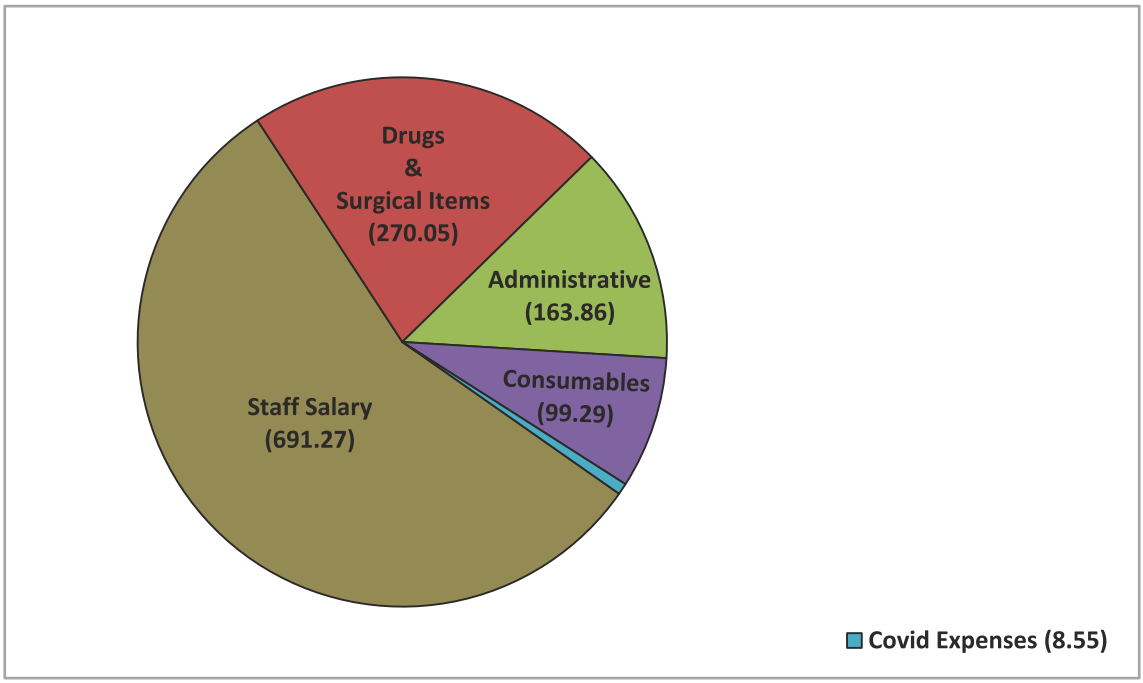
| Tata Memorial Centre's Expenses (in crore) ≅ INR 1233 | | | | |
|---|---|---|---|---|
| **Covid Expenses** | **Drugs & Surgical Items** | **Staff salary** | **Administrative** | **Consumables** |
| **8.55** | **270.05** | **691.27** | **163.86** | **99.29** |

- The **Centre for Cancer Epidemiology** (CCE) in Navi Mumbai did not generate any income.
- The **Dr. B. Barooah Cancer Institute** (BBCI) files taxes separately and hence not included in the above calculations.
- The cancer hospitals in **Mullanpur & Muzaffarpur** in the States of Punjab & Bihar were not yet operational.
- The **HBCH** in **Varanasi** was used for Covid patients in Varanasi from the third quarter of 2020.
- The **HBCHRC** in **Visakhapatnam** would take some more time for substantial contribution as the main hospital building was not yet completed.
- It should be remembered that all costs of medical diagnostics & treatment were lower in those centres' falling under **Tier II and Tier III cities**.

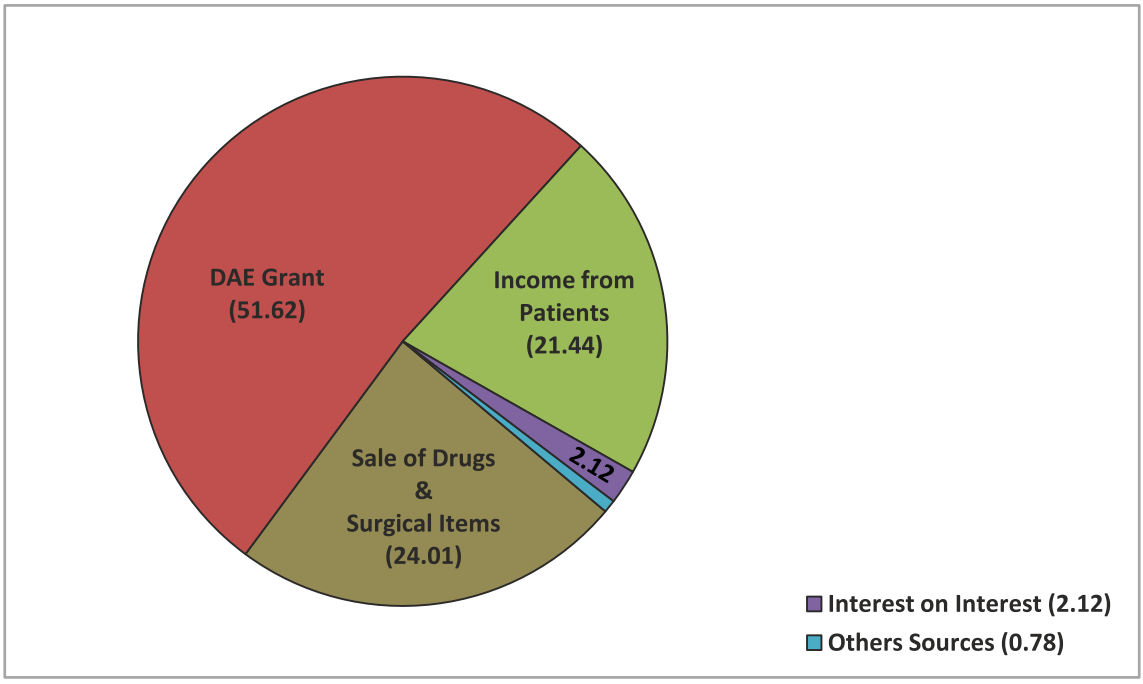
**Income, ≅ INR 1073 crore**
**(2020 - 2021)**



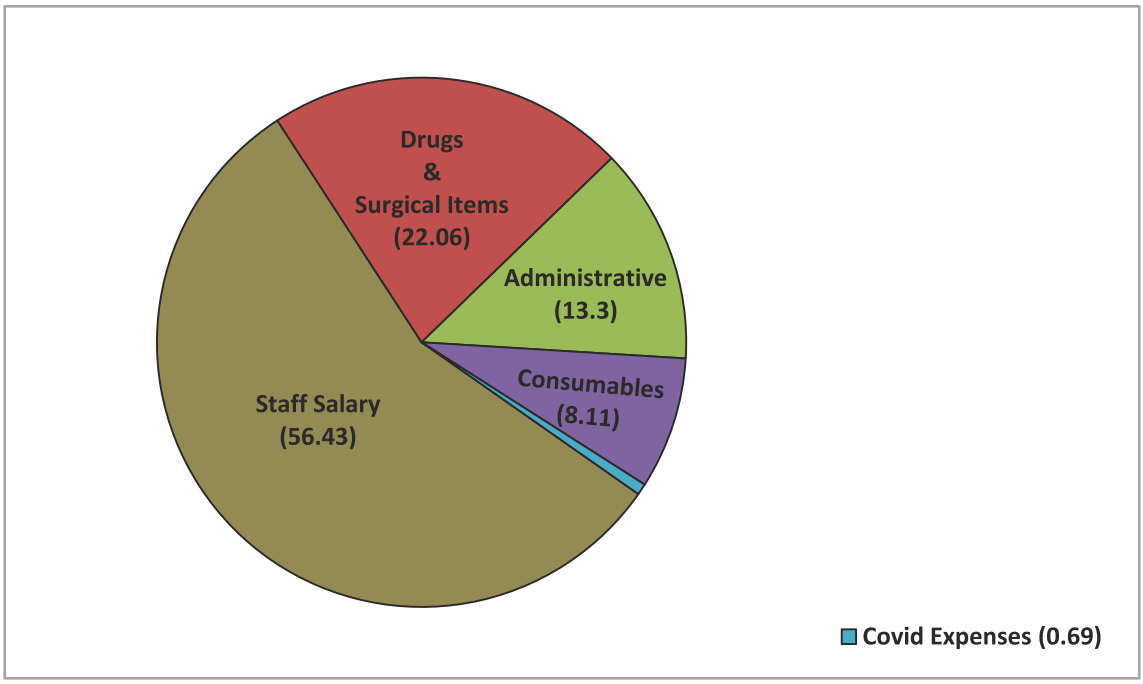
## Expenditure, ≅ INR 1233 crore (2020 - 2021)



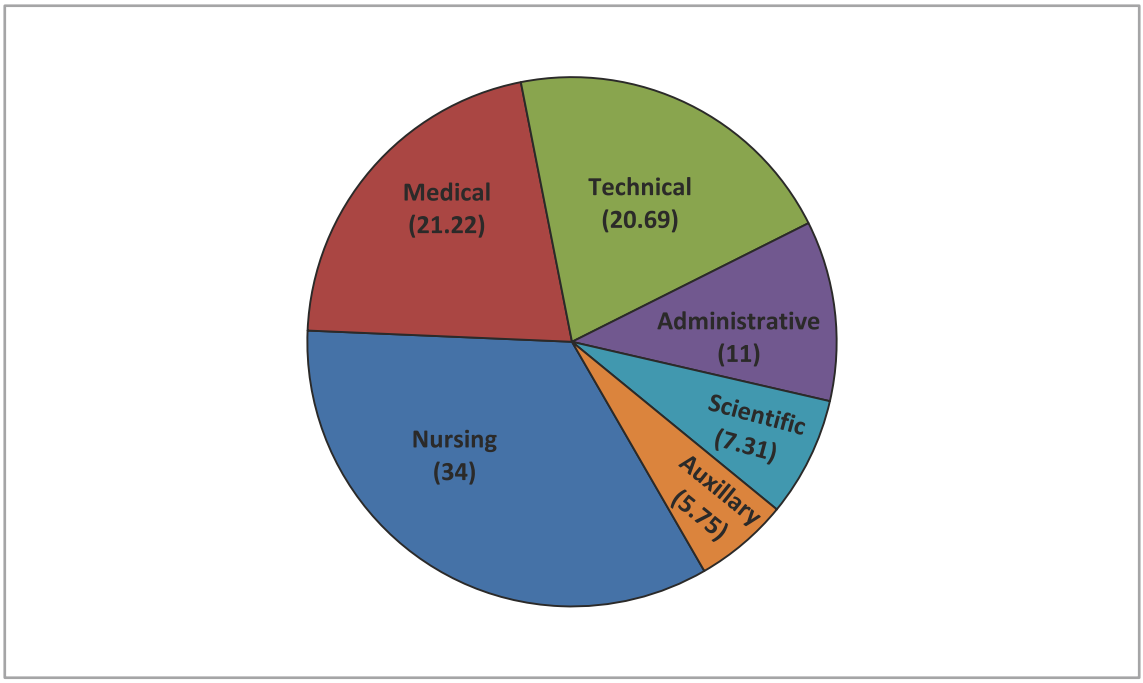

## How the Paisa in a Rupee was earned



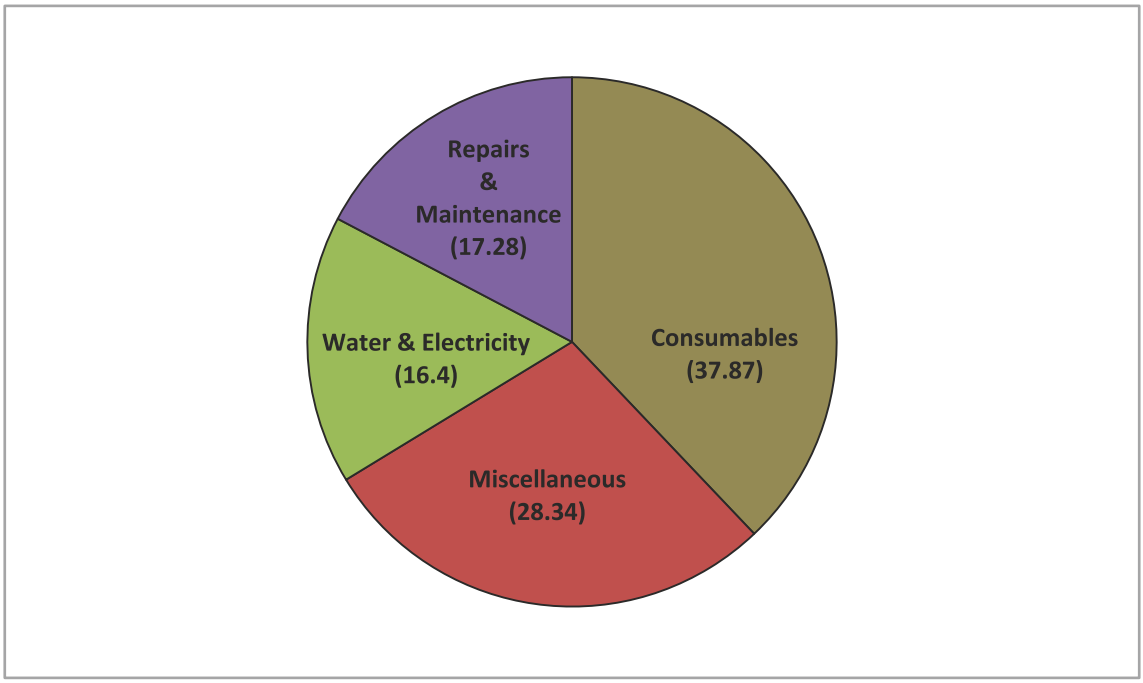
## Where the Paisa from the Rupee went




## Staff Salary of ≅ INR 691 crore; Staff category salary (%)



**Percentage Expenses of ≅ INR 262 crore other than Staff salary & Sale of Drugs & Surgical items**




At the Annual Day celebrations of the Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC) in Varanasi on February 22, 2020.
In the picture from the left: Dr Akash Anand, Assistant Medical Superintendent; Mr. RP Jaiswar, Administrative Coordinator; Dr Rakesh Mittal, Deputy Director; the Chief Guest, Mr Sanjeev Sood, Director TMC Administration (Projects); Dr Satyajit Pradhan, Director; and, Mr Madho Singh, Chief Administrative Officer.

The Homi Bhabha Cancer Hospital in Sangrur, Punjab.

**Tata Memorial Hospital (TMH)**
**Dr. E. Borges Marg, Parel East,**
**Mumbai - 400012, Maharashtra.**
**Tel: +91 22 2417 7000**
**Fax: +91 22 2414 6937**
**Email: msoffice@tmc.gov.in**
**Website: hhtps://tmc.gov.in**

**Advanced Centre for Treatment, Research & Education in Cancer (ACTREC)**
**Sector-22, Kharghar, Navi Mumbai - 410210, Maharashtra.**
**Tel: +91 22 2740 5000**
**Fax: +91 2202740 5085**
**Email: mail@actrec.gov.in**
**Website: http://actrec.gov.in**

**Centre for Cancer Epidemiology (CCE)**
**Sector-22, Kharghar, Navi Mumbai - 410210, Maharashtra.**
**Tel: +91 22 2740 5000**
**Fax: +91 2202740 5085**
**Email: cce.dept@actrec.gov.in**
**Website: tmcepi.gov.in**

**Homi Bhabha Cancer Hospital & Research Centre (HBCHRC)**
**APIIC Industrial Park, Aganampudi Village, Plot No. 212, NH 5,**
**Gajuwaka Mandal, Visakhapatnam - 530053, Andhra Pradesh.**
**Tel: +91 891 287 1561/1569**
**Email: hbchrcvizag.admin@tmc.gov.in; aovizaghbchrc@gmail.com**
**Website: https://tmc.gov.in/tmh/index.php/en/hbchrc-vizag**

**Homi Bhabha Cancer Hospital & Research Centre (HBCHRC)**
**'Medicity' Mullanpur village, New Chandigarh,**
**District SAS Nagar, Mohali, Punjab.**
**Email: mohaliproject@tmc.gov.in**
**Website: https://tmc.gov.in/tmh/index.php/en/hbch-sangrur**

**Homi Bhabha Cancer Hospital (HBCH)**
**Civil District Hospital Campus, Sangrur - 148001, Punjab.**
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**Email: sangrur@gmail.com**
**Website: https://tmc.gov.in/tmh/index.php/en/hbch-sangrur**

**Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC)**
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**Email: admin@mpmmcc.tmc.gov.in; cao@mpmmcc.tmc.gov.in**
**Website: https://tmc.gov.in/tmh/index.php/en/MPMMCC**

**Homi Bhabha Cancer Hospital (HBCH)**
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**Lahartara, Varanasi – 221001, Uttar Pradesh.**
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**Email: cao@mpmmcc.tmc.gov.in**
**Website: https://tmc.gov.in/tmh/index.php/en/hbch-varanasi**

**Dr. Bhubaneswar Borooah Cancer Institute (BBCI)**
**A K Azad Road, Gopinath Nagar, Guwahati - 781016, Assam.**
**Tel: +91 9957033212**
**Fax: +91 361 247 2636**
**Email: bbci_info@yahoo.co.in**
**Website: www.bbcionline.org**