INDIAN CANCER SOCIETY

RISE AGAINST CANCER

Decade of Saving Lives

Cancer Cure Fund

CELEBRATING

10 YEARS

OF SAVING LIVES

CANCER CURE FUND

A novel approach for affordable and accessible cancer care for underprivileged cancer patients

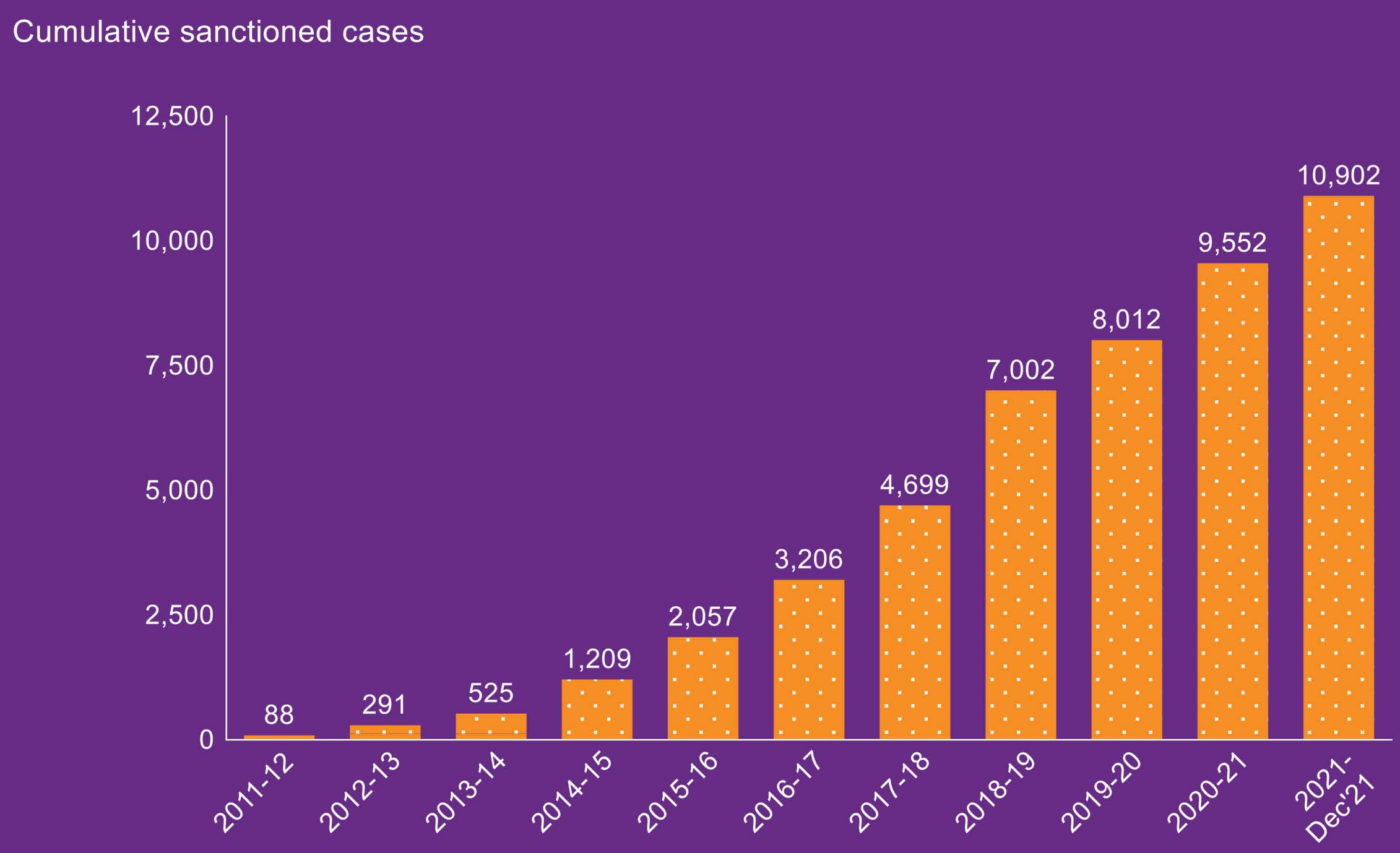
Decade of Saving Lives | Cancer Cure Fund

This document is dedicated to over 10000+ patients supported by the Cancer Cure Fund - a sustainable, accessible and affordable model of philanthropic funding for cancer treatment.

We proudly present the decade long journey of the Cancer Cure Fund – its pursuits, innovations and aspirations.

Usha Thorat
Trustee ICS
Chairperson Governing Advisory Council
Cancer Cure Fund

Cumulative impact of CCF over the last decade



	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-Dec'21
Cum. Hospital empanelled	3	8	8	10	15	16	16	16	16	16	17
Cum. Amt. disbursement (Rs in Cr)	0.64	3.40	6.42	17.95	34.59	55.70	76.34	101.27	130.60	153.70	171.62

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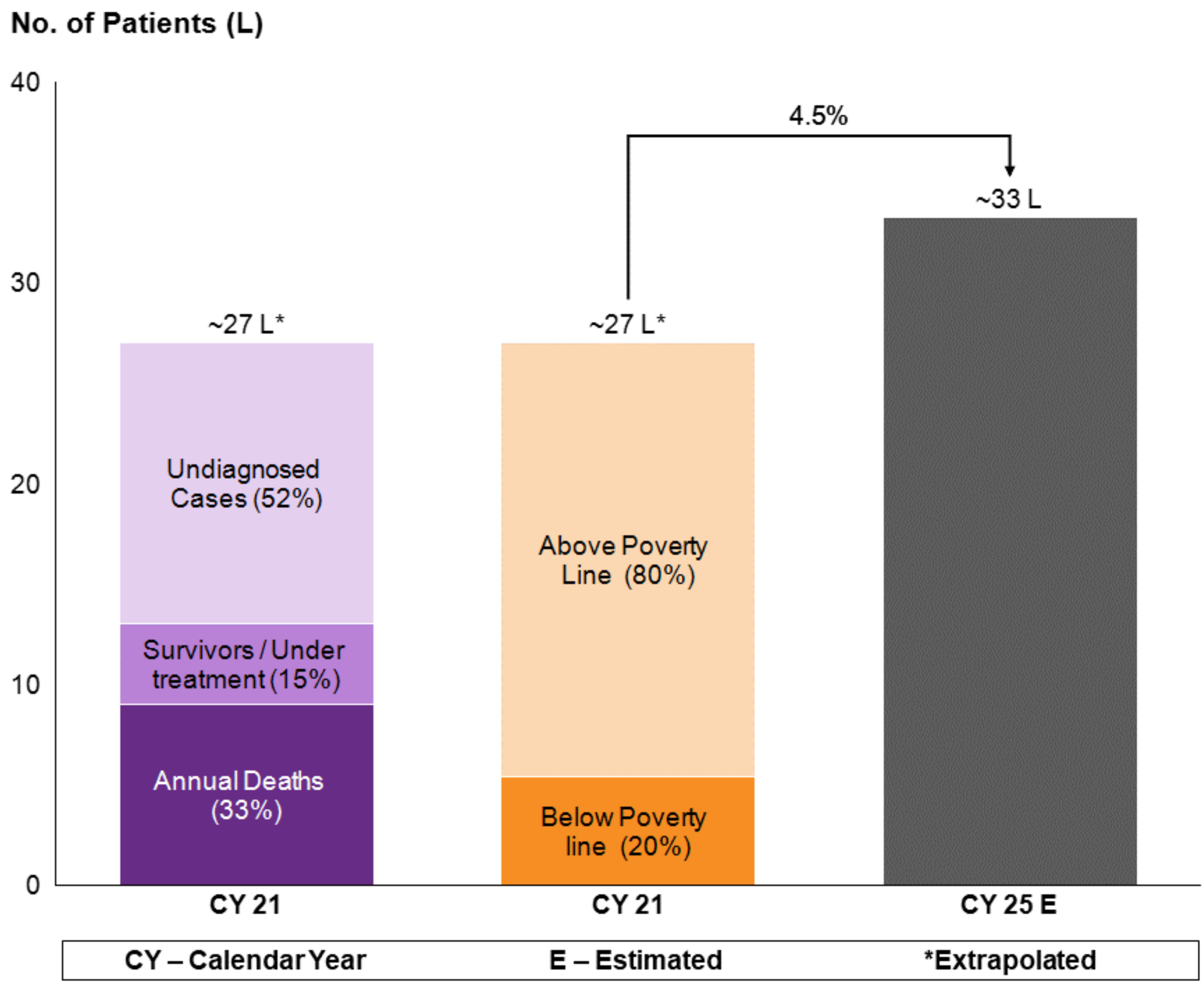
BACKGROUND

Cancer has evolved to become a major cause of death globally, with incidence and mortality rates on the rise over the last few decades. In India the cancer burden is expected to increase from ~13L in 2021 to ~16L by 2025 growing at 9% y-o-y (National Cancer Registry Program 2012-16).

Cancer was responsible for ~100L deaths globally (WHO Cancer Report 2020) of which ~9L recorded deaths occurred in India. India's cancer burden has increased 2.6 times between 1990 and 2016 and the rate of deaths from the disease has doubled.

India is a lower-middle income country and findings from the World Cancer Report 2020 suggest that socioeconomic background has an impact on whether an individual/population is at the risk of exposure to cancer. Further, the report found that in India, incidence of cervical and oral cancer is higher among those from lower socioeconomic status, while breast and colorectal cancer is more prevalent among those from a higher socioeconomic status. Oral cancer is linked to tobacco use, while breast and colorectal cancers are attributed to a sedentary lifestyle and obesity. In 2016, it was also found that approximately 70% of deaths from cancer occurred in low and middle-income countries, highlighting a visible inequality in cancer awareness, prevention, diagnosis and care.



Key challenges faced in Cancer screening and treatment in India

Accessibility gap in India: No systematic approach, sparsely distributed hospitals

Given the need for specialized cancer care, the lack of accessible healthcare centers is a major challenge. Currently HMCPF (Health Minister's Cancer Patient's Fund) under Rashtriya Arogya Nidhi (RAN) has empanelled 27 regional hospitals (Annex 3) across the country where cancer treatment is provided free to below poverty line (BPL) patients. These 27 hospitals bear a patient load of 2.5-5L BPL patients from urban and rural areas each year.

This lack of proximity results in ~50% patients not being diagnosed / screened/treated at the right time. Currently there is no institutionalised, credible, non-bureaucratic and simple system to identify such patients and scientifically evaluate them for their prognosis and start immediate treatment with financial assistance.
Lack of faith in standard of care provided further funnels patient traffic to select hospitals (e.g. Tata Memorial Hospital Mumbai, CMC Vellore, CI Chennai). Patients under treatment have to relocate close to these centers along with a few household members through the journey of the treatment which can extend from 1-2 months to a year. This significant financial burden on the household income causes several patients to drop out of treatment.

Affordability gap in India: Prohibitive costs, insufficient sustainable funding

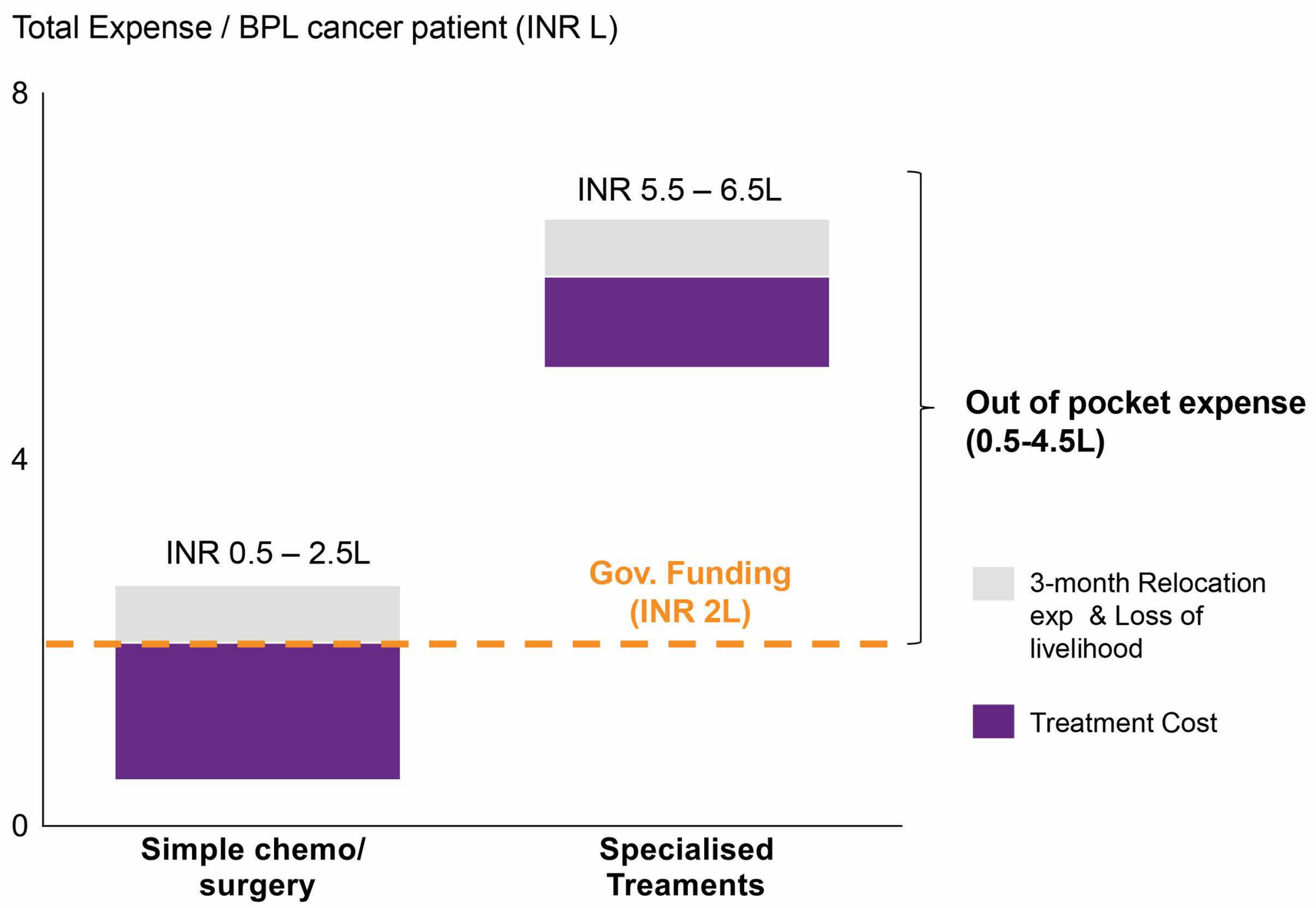
Average annual household income is INR ~1.3 L (LASI Survey 2017-18) and poverty line threshold (bottom 20%) is INR ~10 K (Tendulkar Committee 2012). Whereas, complete cancer treatment in India, depending on type, extent, duration and hospital, could cost anywhere between INR 1 to 10 lakh (ICS Estimate 2022). Of this, out of pocket expenditure on in-patient and out-patient cancer cure is ~INR 85K and is borne by ~60% of the patients, pushing ~ 2L households below poverty line every year. (A. Dhankhar 2021)

The gravity of the situation becomes clearer when one considers the public expenditure on cancer in India, which is estimated to be below INR 720 per person per annum. It is important to also note that approximately, only 14% of the rural population and 19% of the urban population had health expenditure coverage in 2018. The significant financial burden a cancer diagnosis inflicts on cancer patients in India has ramifications on the welfare of the entire family, which may also continue for several generations.

Additionally, available government funds are also spread across multiple schemes (Annex 4) requiring patients / social workers to access several sources for a single patient. Moreover, national schemes like Ayushman Bharat PMJAY which cover upto 5L in treatment costs cover only a limited set of procedures after a thorough 2-step pre-authorization which requires patients to list a detailed course of treatment.

NGOs in the space on the other hand are saddled by an absence of regular sustainable funding model to ensure uninterrupted treatment support to the patient. Donors are careful in providing funds to NGOs for cancer treatment due to lack of confidence about fund utilization, concerns about standard of care and reasonableness of cost of treatment. They prefer sending their donations directly to hospitals like the ones mentioned above.

National and State funds fall short of covering treatment and relocation expenses



WHO and Government of India goals

WHO has recommended a few steps for reducing the cancer burden through early detection and management of the disease - Awareness and accessing care, Clinical evaluation and diagnosis and Timely access to treatment. Early diagnosis or detection must be followed by screening and treatment. These three components must go hand in hand, to cure patients, or at least improve their quality of life.

The Government of India is committed to the 2030 Agenda for Sustainable Development. In the Agenda, Goal 3 (Good Health and Well Being) highlights the need to 'ensure healthy lives and promote well-being for all at all ages' and Target 3.4 within that Goal includes reducing by one-third premature mortality from non-communicable diseases including cardiovascular disease, cancer, chronic respiratory disease and diabetes. Under the present circumstances, attaining this goal could be a challenge. This is where organizations such as Indian Cancer Society (ICS) play an important role. Through their interventions, they not only aid in reducing the cancer burden in this country, but contribute towards the Sustainable Development Goals.

INDIAN CANCER SOCIETY CANCER CURE FUND (ICS-CCF)

The funding journey

Indian Cancer Society was established in 1951 by Dr. D.J. Jussawalla and Mr. Naval Tata as India's first voluntary, non-profit, National Organization for Awareness, Detection, Cure and Survivorship of those affected with this disease.

Birth of the Cancer Cure Fund

Dr Arun Kurkure, Nihal Kaviratne and Hari Mundra, trustees of ICS, initiate discussions, early 2009

Identify the need to evolve an innovative idea of raising funds that would provide certainty of funding year after year for treatment of underprivileged cancer patients.

Mail from Dr. Arun Kurkure to Hari Mundra and Smita Aggarwal, 5th Oct. 2009

We need to move quickly as this is a fantastic idea. As a medical person, I have promoted this idea in theory. Since we know that it is an actionable idea what we need now is a business model. It will be great to make a formal announcement on Founders Day.

Session with Fund Managers and Private Wealth Managers, 15th Jan. 2010

CCF concept envisaged – a co-branded scheme with an existing reputed fund house with the explicitly stated purpose that part of the returns generated from the fund would be donated to ICS to provide financial assistance for supporting the treatment of poor patients. HDFC AMC came up with the meaningful proposal, a three-year close ended mutual fund where the dividend would be given up by the investors in the fund –either wholly or fifty percent.

L to R – (Late) Dr Arun Kurkure, Chairman, ICS, Mr Milind Barve, Former MD, HDFC AMC, Mr Deepak Parekh, Chairman, HDFC and Mr Nihal Kaviratne, CBE, Founder St. Jude India Child Care Centre

HDFC Debt Fund for Cancer Cure, a philanthropic initiative by HDFC Mutual Fund was first launched in 2011 as a unique, first of its kind mutual fund scheme. It was followed by two series. The last one matured in May 2020. In the first series, the investors donated amounts earned from the dividend declared by the scheme. In the subsequent series, the dividends were matched by HDFC AMC subject to limits, doubling the impact made by the investors.

As a donor funded organization, ICS' biggest constraint is in helping the hundreds of patients who knocked at our door. Raising adhoc donations for some patients was not a solution that could create any meaningful impact. So one of the key aspects we had to solve was not just raising a large amount of funds but also ensuring sustainability and predictability of funding available.

SMITA AGGARWAL

(Former Member Secretary,
Governing Advisory Council)

The Cancer Cure Fund has had ripple effects of two kinds. The investors were happy that their donations got effectively doubled because of the matching contribution subject to certain limits from HDFC AMC.

The second ripple effect was that other corporates were drawn to the fund because of the sponsorship by HDFC AMC.

Rs in Cr

Year/s	Dividend from investors	Donation from HDFC AMC	Donation from other sources	Total
2011-2014	12.77	0.25	0.00	13.02
2014-2017	25.86	23.50	2.11	51.46
2017-2020	43.66	45.63	13.79	103.08
2020-2021	1.89	1.89	4.79	8.57
2021-Dec2021		7.50	9.04	16.54
Total	84.18	78.77	29.72	192.67

This Cancer Cure Fund project has allowed large number of individuals to complete their treatment and in my opinion it's the most mature support system that can be offered monetarily.

Padma Shri Dr. (Prof) R A Badwe

Director, Tata Medical Centre

THE CANCER CURE FUND SYSTEM

Donors

Below are the donors who have directly contributed to the CCF over the years.

Donor	Donation Amount (Rs in Cr)
HDFC AMC Ltd	162.95
Bharat Petroleum Corporation Ltd.	19.75
Clearing Corporation of India Ltd.	4.00
SBI Foundation	3.00
Aditya Birla Camital Foundation	1.00
Individual Donors	0.67
Union Bank of India	0.60
AT&T	0.50
STCIPD	0.30
CRISIL	0.08
Total	192.67

For all of us at HDFC Mutual Fund and HDFC Asset Management Co., it is a matter of great pride and privilege to be associated with ICS-CCF. Over the years, we combined our expertise as an Asset Management Company and reached out to all our customers who believe in this cause and who believed that they can make a contribution to save the lives of those afflicted with cancer.

Milind Barve

Former MD, HDFC AMC

The sustainable funding model has enabled us in the CCF to focus on planning the scale of operations and accordingly empanel hospitals and deploy resources -including people and technology- without the stress of wondering where the next year's funding is going to come from

Usha Thorat

Chairperson, Governing Advisory Council, CCF

Right Partner Institutes

The empanelled hospitals are the most important partners in the administration of the CCF for supporting needy cancer patients. Hence selection of hospitals is given very careful deliberation.

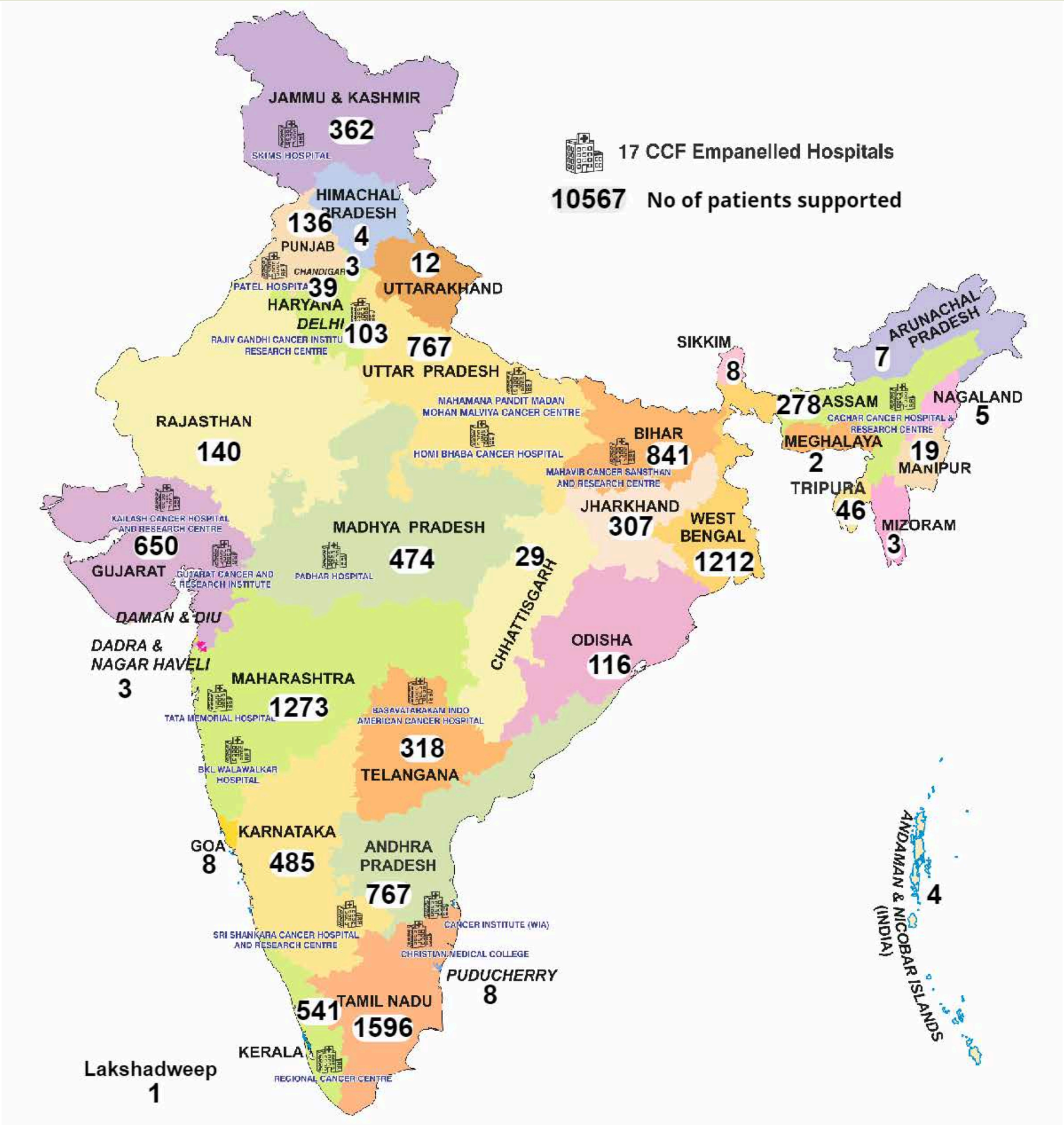
Hospitals which are selected on the basis of a detailed due diligence process are continually kept under review for empanelment based on track record in medical and operational parameters. Periodic visits and external audit of the hospital are also undertaken. Non-adherence to CCF guidelines can result in dis-empanelment.

Criteria that go into the selection of hospitals are

- **Location and footprint:** the objective being to spread to as many remote areas as possible across the country
- **In-house surgery, radiation and chemotherapy** capability following "standard of care" protocol
- **Public perception:** "go to hospitals" for the low-income sectors of society
- **Lower cost of treatment for BPL patients:** Standardized costs (via "Rate cards") and willingness to waive charges such as room rent, bed charges, professional fees, operation theatre charges etc

CCF empanelled hospitals include Government, Private, and NGO- run hospitals

Hospital Name	State	Year of empanellment
Tata Memorial Hospital (TMH)	Maharashtra	2011
Regional Cancer Centre (RCC)	Kerala	2011
Christian Medical College (CMC)	Tamil Nadu	2012
Cancer Institute (CI)	Tamil Nadu	2012
Gujarat Cancer Research Institute (GCRI)	Gujarat	2012
Rajiv Gandhi Cancer Institute & Research Center (RGCI)	Delhi	2012
Sher i Kashmir Institute of Medical Sciences (SKIMS)	J &K	2012
BKL Walawalkar Hospital (BKL)	Maharashtra	2014
Basavatarakam Indo American Cancer Hospital (Indo)	Telangana	2015
Kailash Cancer Hospital (KCH)	Gujarat	2015
Patel Hospital (PATEL)	Punjab	2015
Mahavir Cancer Sanstha and Research Center (MCSRC)	Bihar	2015
Cachar Cancer Hospital & Research Center (CCHRC)	Assam	2016
Sri Shankara Cancer Hospital & Research Center (SSCHRC)	Karnataka	2017
Padhar Hospital (PADHAR)	Madhya Pradesh	2019
Homi Bhaba Cancer Hospital (HBCH)	Uttar Pradesh	2019
Mahamana Pandit Madan Mohan Malaviya Cancer Centre (MPMMCC)	Uttar Pradesh	2021



Cancer Institute (W.I.A) Chennai, is privileged to be associated with Indian Cancer Society (ICS). Over the last 6 decades we have strived hard to provide state- of-the- art treatment to the underprivileged without any social or economic divide. This has been made easier by the generosity of ICS whose funding has helped us to fulfill the needs of many patients. The unique feature of the funding from ICS is the promptness with which the funds are released. This has helped us in treating patients without delay. We are extremely proud to say that we have not refused treatment to any of the patients who have come seeking help.

Late Padma Vibhushan Dr. V.Shanta
Chairperson

Cancer Institute, Adyar

How the Cancer Cure Fund Operates

Hospital

- Large footprint and positive perception
- In-house cancer treatment capability
- Treatment provided at lowest cost (bed charges, surgeon/doctor's fees are waived)

Patients

- Household income < INR 4L p.a.
- Meets survival criteria > 50%
- Cashless support within 18 days
- Max. disbursal INR 5L / patient

INDIAN CANCER SOCIETY

ICS

- Expert oncologists & AI/ ML screen applications
- Standard of care and cost evaluated
- Income tax benefit, audited reports to donor and outcome studies

Donor

- HDFC Mutual Fund investors contributed 50-100% dividend of a close ended fund
- CSR contribution by corporates and donation from individual donors

Who is eligible, for what purpose and how much?

Patient's eligibility criteria

Indian Citizen

Current family income does not exceed INR 4L per annum

Registered under General category at the empanelled hospital

Projected five-year survival of 50% or more for adult patients (>15 years) and 60% or more for paediatric (up to 15 years)

What the support covers

Surgery

Chemotherapy

Radiation Therapy

Supportive Care (Investigation charges including all the tests) Prosthesis

How much

Upto INR 5L per patient and for Bone Marrow Transplant upto INR 8L

This amount is by and large enough to cover the cost of treatment of most common cancers but may cover only part of BMT cost

Re-application is allowed as long as survival criteria is fulfilled at the time of reapplication and cost does not exceed in all the limits specified. In order to optimize the cost of treatment, the scheme operates with benchmarks or the cost of drugs, surgery and supportive care for some of the most common cancers.

The work process

Empanelled Hospital

Identifies patient:
Chooses eligible patients for CCF funding

Responds to queries:
Responds to CCF/ DDT/ GAC queries

Follow up and reports:
Sends reports on use of funds and patient status

AI & Due Dilligence Team

Screens:
Screens every application from medical and cost aspect

Seeks Clarification:
For applications put on hold

Recommends:
Recommends sanction, rejection or put on hold for GAC approval

Governing Advisory Council

Reviews:
Reviews all AI (Navya) DDT screened applications - meets twice a month

Decides:
Confirms sanction/ reject/hold

Strategy and policies:
Evolves strategy, lays down policies and monitors adminstration of the CCF

CCF Team

Coordinates:
Coordinates entire process between Empanelled Hospitals, DDT & GAC

Responds to queries:
Applications, disbursements, utilisation

Monitoring:
MIS, Reports, patient follow up, adherance to guidelines

Every patient application goes through a five step process to ensure they meet the CCF guidelines

- Screening at empanelled hospital by the treating doctor – eligible patients identified.
- CCF team ensures completeness and accuracy in the documents submitted before uploading and anonymising the patient's personal information on to the ERP web-based software.
- Navya's AI tool is used to evaluate the applications; those that do not have the required evidence/required clinical information are referred to DDT. All 'reject' cases are also seen by the Due Diligence Teams (DDTs).
- DDTs comprising of cancer experts go through all applications referred by Navya, give their recommendations to accept or reject based on their expert judgement.
- Final sanction of applications by ICS-CCF Governing Advisory Council (GAC) comprising of ICS trustees and leading finance, corporate and medical professionals who review every form recommended or rejected by Navya and DDT at meetings that are held fortnightly.
- Disbursal and coordination by CCF team which tracks disbursal and utilisation of funds as well as patient outcomes

Role of GAC

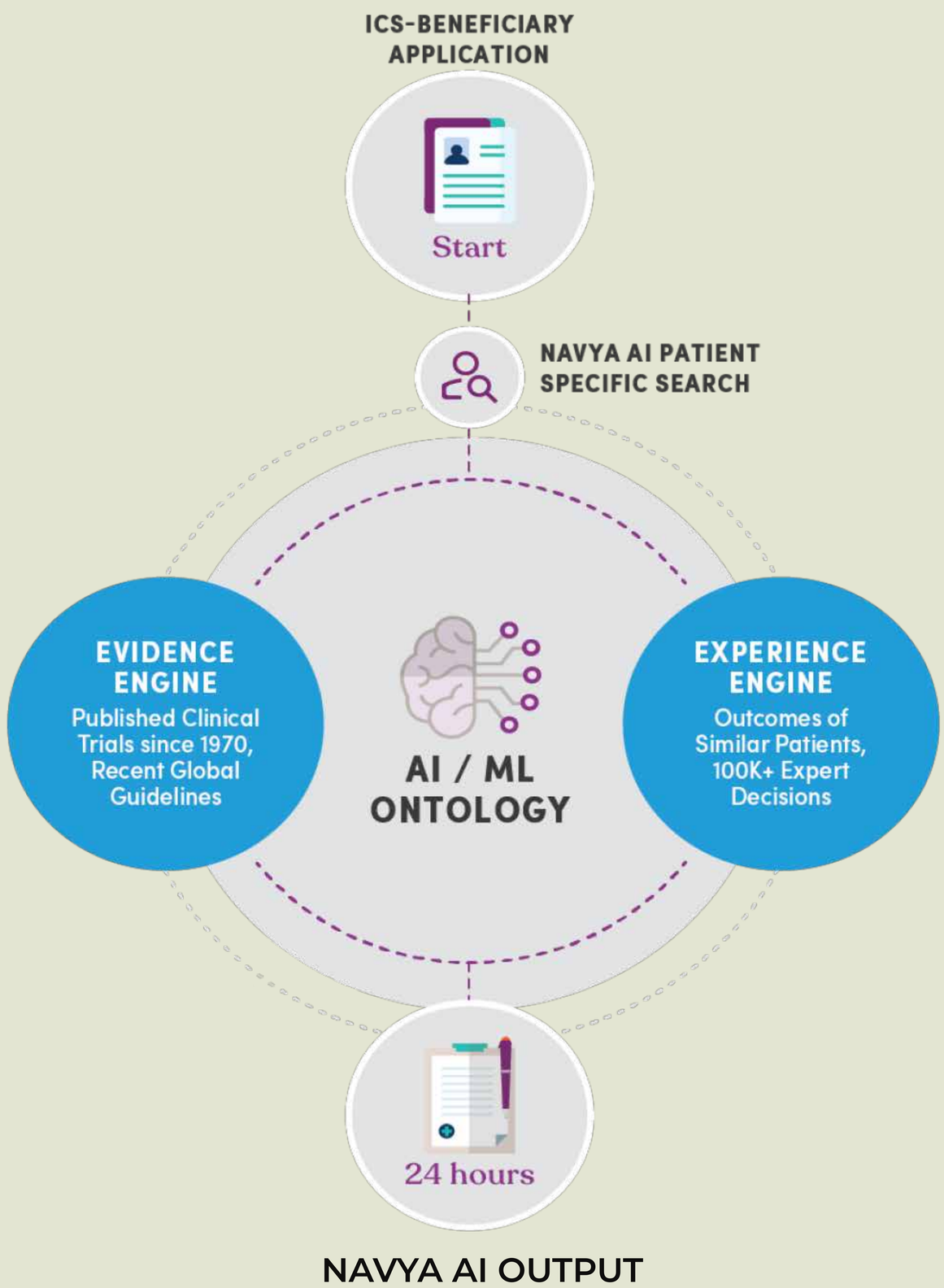
1. Empanels and dis-empanels hospitals
2. Reviews policies, systems and procedures for compliance with guidelines
3. Evaluates outcomes
4. Arranges for audit

Use of AI/ML tool for assessing support from CCF

An important milestone in 2020 was to adopt NAVYA Technology for initial screening of applications from hospitals after a careful evaluation.

Navya AI Evaluation Process

- Navya AI—a clinically validated AI system—matches clinical data of beneficiary applicants (Navya AI Input) with evidence and expert recommendations, adapted to the ICS-CCF approval criteria (Navya AI Output).
- Navya AI recommends an application to GAC when the Navya AI output matches the CCF criteria.
- Navya AI refers to DDT when there is no Navya AI Output due to insufficient clinical information (inadequate Input) or lack of matching evidence or experimental data.
- Simultaneously, DDT reviews all Navya referred applications and provides expert opinion to GAC.
- Concordance is assessed between Navya AI and GAC decisions.
- DDT time to review a Navya AI deferred application is measured. 80 percent DDT time is saved.
- Regular analysis, presentations in peer-reviewed meetings, validations.



The AI algorithms provided by Navya will help to fully automate a good part of the decision-making process.

Dr Anita Borges

ICS Vice President, Trustee, GAC member

Distinguishing features of CCF Model

- **Short turnaround time of 18 days** from submitting the completed form till the sanctioning of the application and communicating it to the hospitals thereby ensuring the treatment of the patient is not delayed and the progression of the disease is arrested in a timely way.

- **Relieve patients from the burden of treatment, drugs and accommodation cost:** The key focus of the program is sanctioning the full treatment amount in one go which takes away the entire stress of the patient to run around raising funds by approaching other donors, selling their property, gold etc. The patient and his/her relatives can focus quality time on the treatment. Furthermore with the empanelled hospitals closer to their home the anxiety of moving to another state, searching for accommodation, language issues are dealt with.

- **Direct disbursement to hospital:** The approved grant is directly transferred to the ICS-CCF bank account at the hospital which earmarks the amount to the patients account.

- **Disbursements processed in installments** with each subsequent disbursement given only after verification of the utilization of the earlier disbursal. Every penny of the donor utilized judiciously.

- **No cash reimbursement permitted** from the grant given by the fund. The amount sanctioned is to be used only for payment of bills raised by the hospital for the sanctioned patient's cancer treatment.

- **Detailed follow-up of un-utilized funds** done with the empanelled hospitals wherever treatment of the patient is completed. Any excess amounts are recalled by ICS and refunded by the hospitals. CCF has managed to get a refund of Rs.31 cr. from the hospitals over the years thus ensuring faster turnaround of funds to treat more patients.

- **Designated CCF coordinator for empanelled hospitals** is the single point of contact for ICS-CCF and is a part of the social work team at the hospital. The coordinator fills and assesses the forms, follows up with the selected patients, provides quarterly reports of ICS-CCF funded patients, submits utilization certificates and replies to any query requested.

- **Regular patient follow-up** by ICS team to confirm the health and treatment status.

- **Detailed audit trail:** Depending on the donor requirement, ICS-CCF provides audited fund utilization reports, progress report, case studies of the patients etc.

With the newer modalities of treatment, the outcome of many non-metastatic cancers has now improved and we can expect more than half of these patients to survive. However, this improved outcome comes at a cost which is beyond the reach of many patients in India. Because of timely help from ICS CCF, thousands of patients across India could undergo treatment with dignity and are now cured of their disease. Thank you, ICS, for making this possible.

Dr S Banavali, MD

Director Academics, Tata Memorial Centre

It is a pleasure to work with ICS- Cancer Cure Department. In a remote place like Cachar, our efforts to treat cancer patients is made worthwhile on account of the support we get from ICS. The team at ICS is committed and makes us feel part of a much larger mission.

Padma Shri Dr. Ravi Kannan,

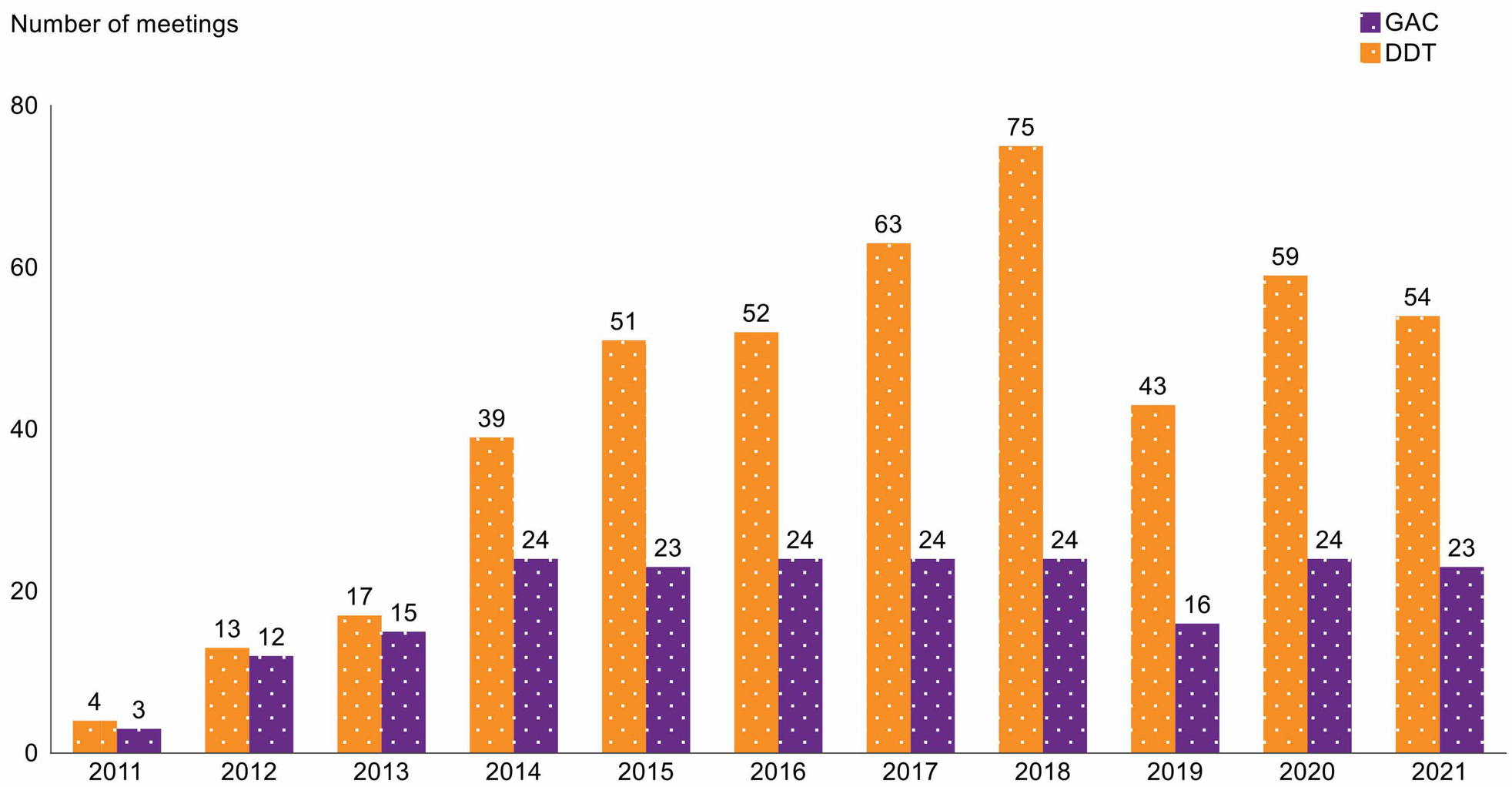
Director, Cachar Cancer Hospital and Research Centre, Assam

Scaling up and speedier processing

1. **Use of IT**
Series I - Desktop based software application
Series II - Enhanced to Web based software application
Series III - Upgradation with unique enhancements for real time reports, online DDT meetings and Navya tab. This development has greatly facilitated virtual meetings during the Covid period.

2. **More DDTs** As applications increased there was a requirement for quicker processing which was not possible with the current limited DDT resources. Therefore in 2017 the TMC, ACTREC, Kharghar, Mumbai and the Bengaluru DDTs were set up. The need to scale up and simultaneously reduce the burden on the DDT led to in-depth discussion and research, resulting in CCF collaborating with Navya Technologies for initial screening of applications.

3. **Use of AI/ML** ensured speedier processing of the applications thereby saving DDT time.



Given the sheer value of work involved as ICS scales up its CCF vertical, it is evident that there is a need to supplement and complement the DDTs crucial role of screening and recommending cases to GAC for approval. It is here that Navya with its AI skills and competencies, using DDT inputs and other data, has helped ICS in the stage 1 screening process, leaving more debatable cases for deliberation by DDTs/GAC. Navya has thus added a new dimension to the effectiveness of DDTs and GAC. Thank you Navya.

Mr. M.K. Sharma

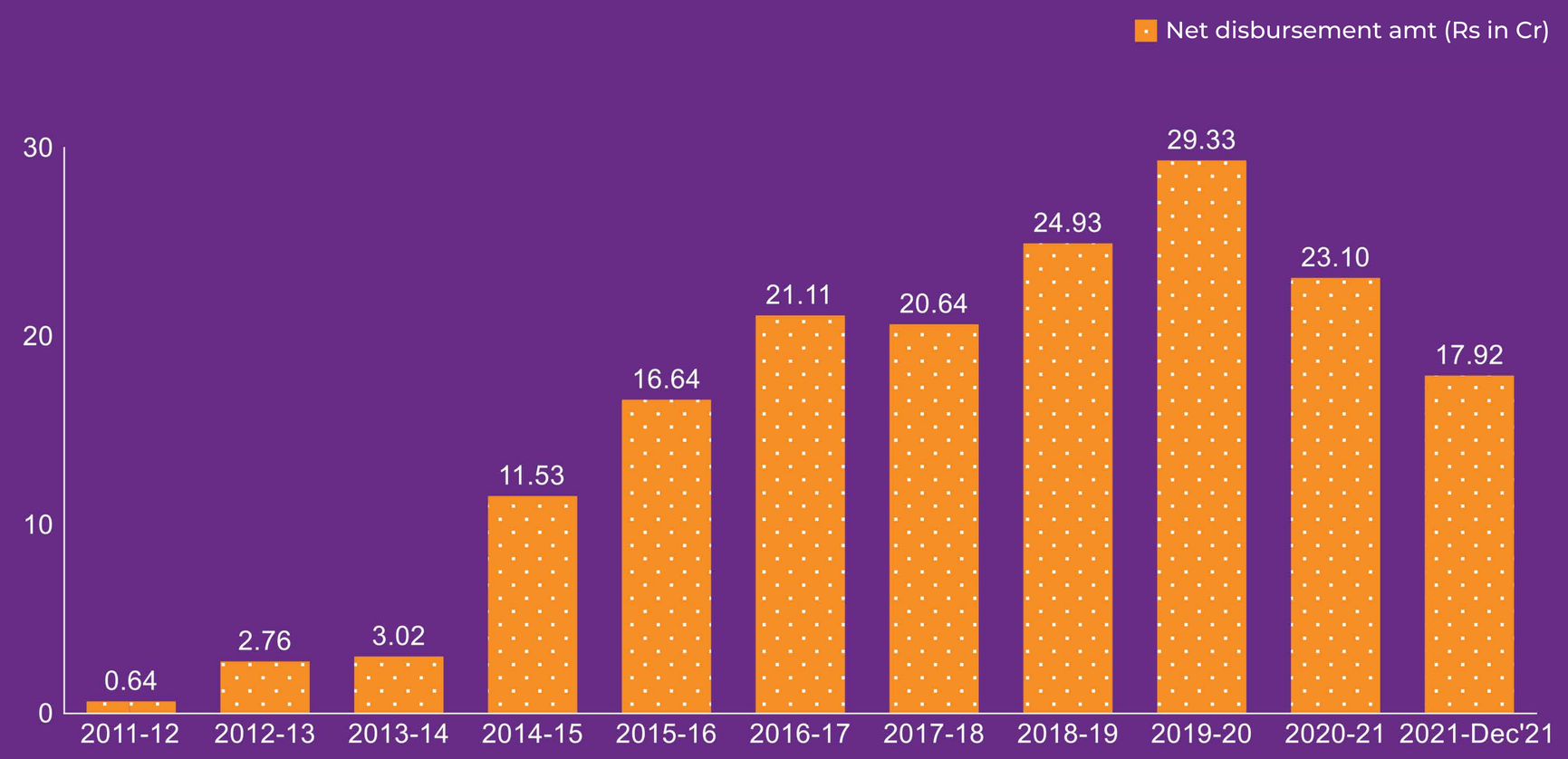
ICS Trustee and GAC member

The Christian Medical College, Vellore has been striving to provide excellent, affordable care to patients who come from all over the country. Patients who come from the poorer and vulnerable strata of society are preferentially afforded the best possible treatment. Partnering with the Indian Cancer Society in providing funding for cancers has tremendously increased the number of such patients receiving treatment. They go home with a satisfied smile and much gratitude, knowing that they have been looked after in the best way possible. Thank you ICS and all your donor funding partners for boosting our ability to deliver such treatments.

Dr. Raju Titus Chacko

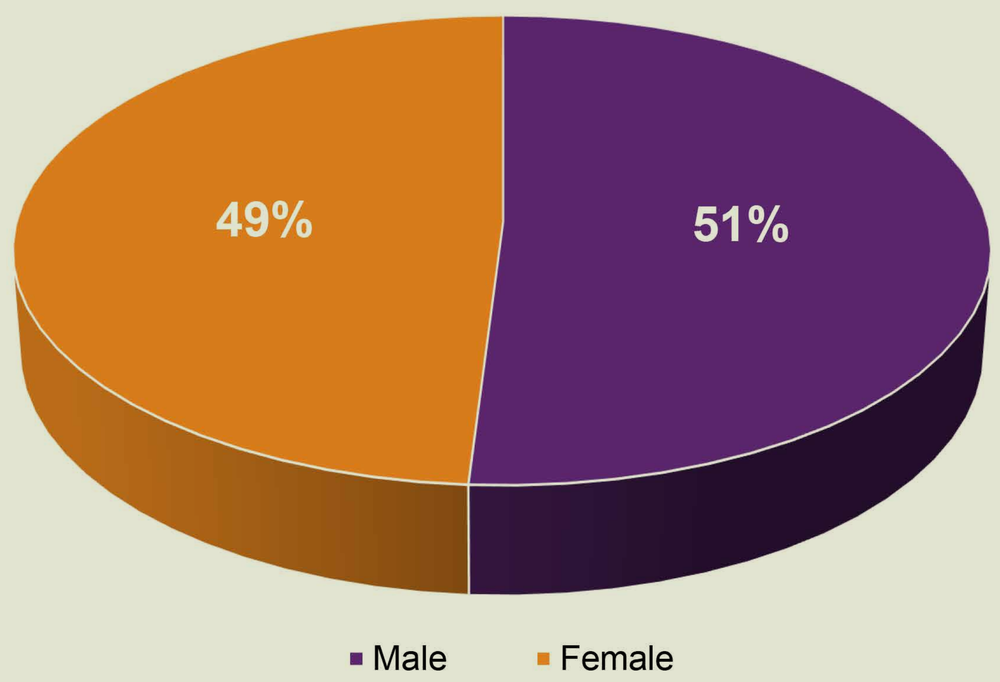
Professor Medical Oncology, Christian Medical College, Vellore

SUPPORT OVER LAST 10 YEARS

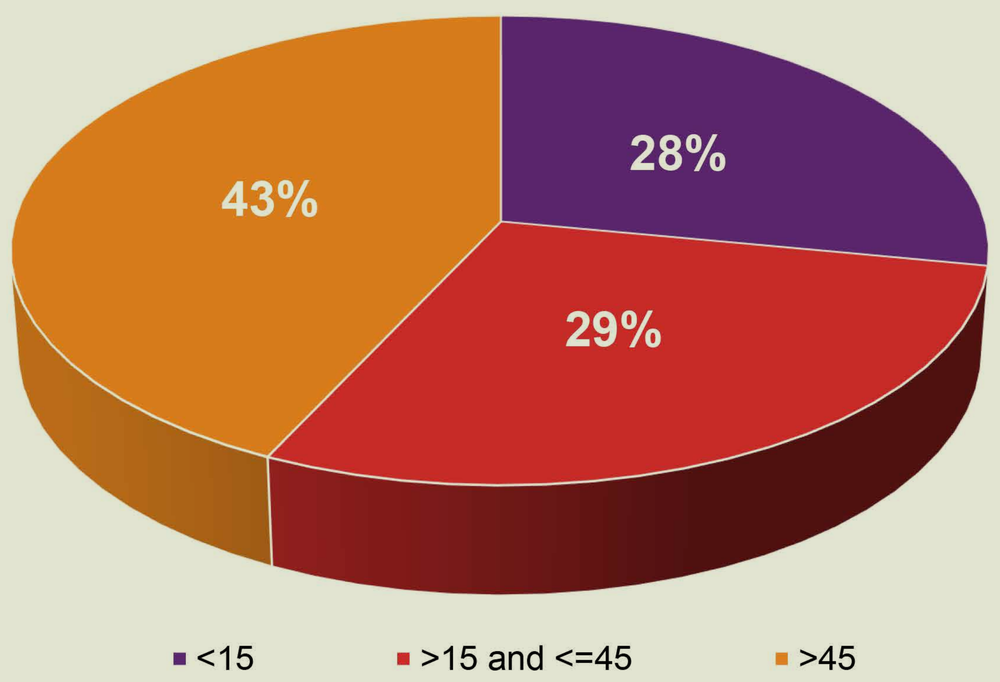


	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-Dec'21
No of cases sanctioned	88	203	234	684	848	1,149	1,493	2,303	1,010	1,540	1,350

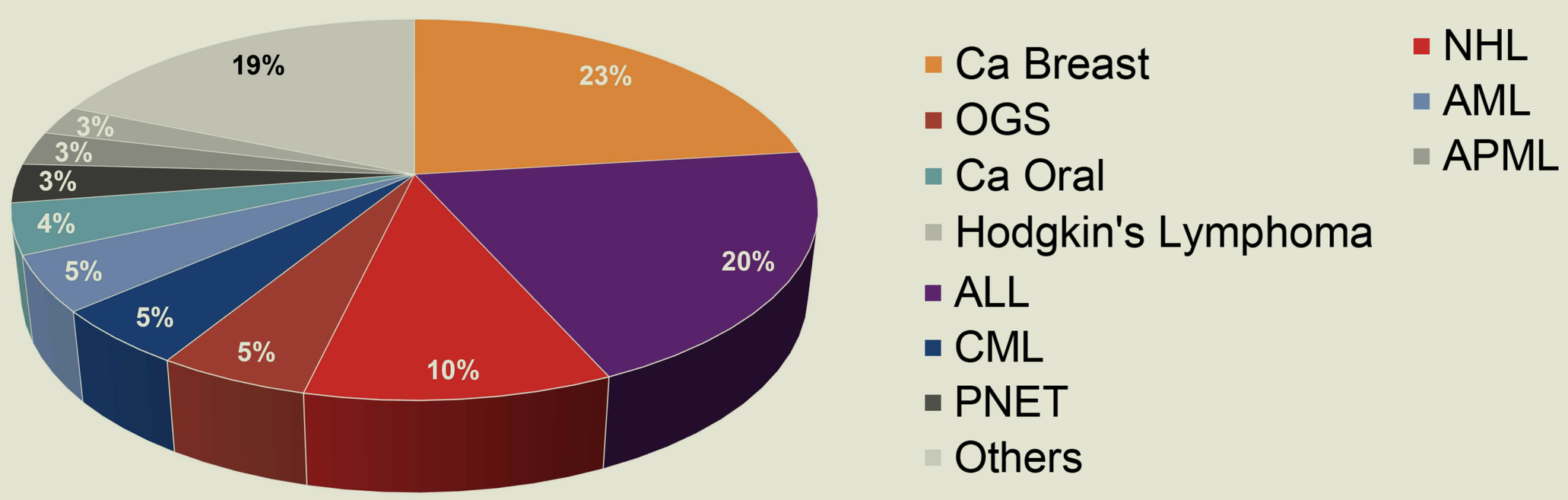
GENDER



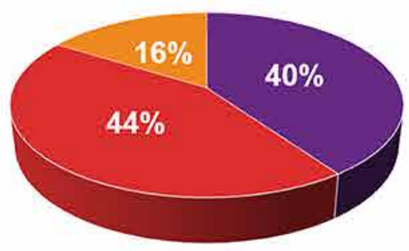
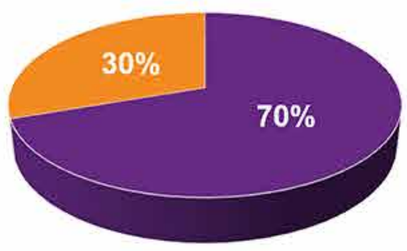
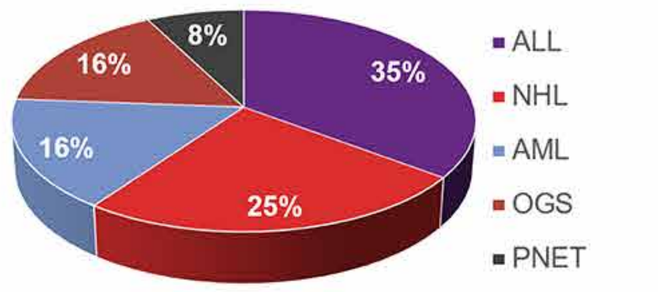
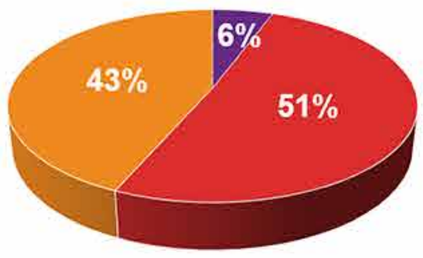
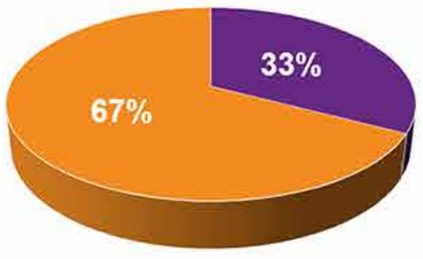
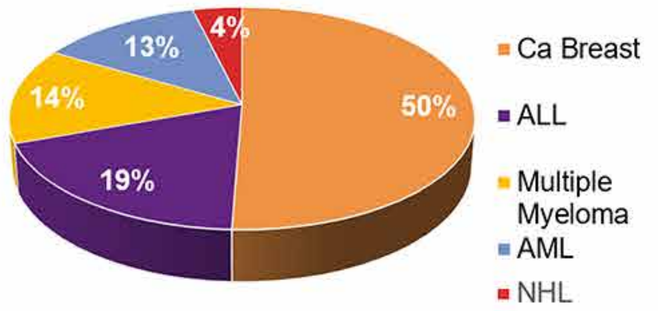
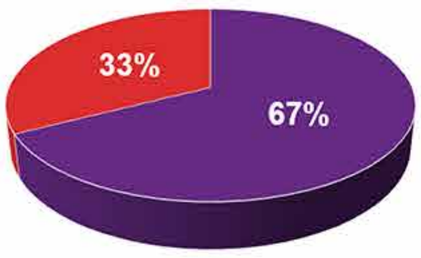
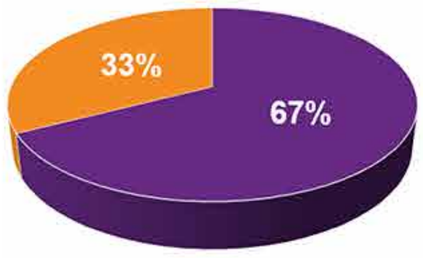
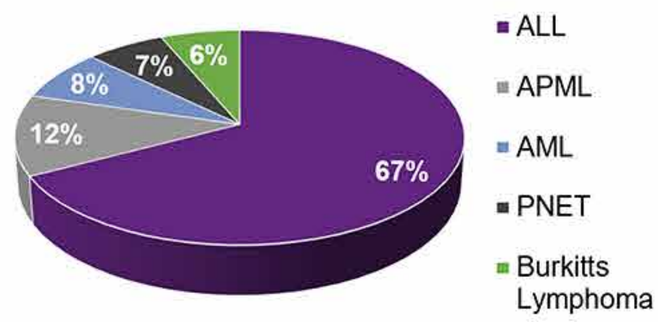
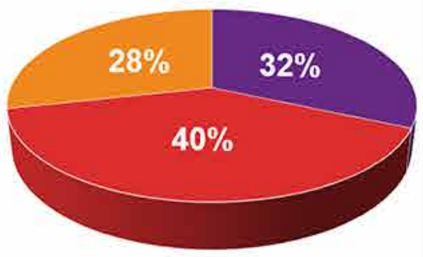
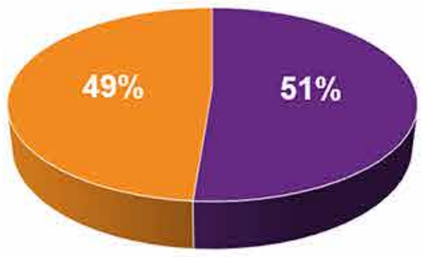
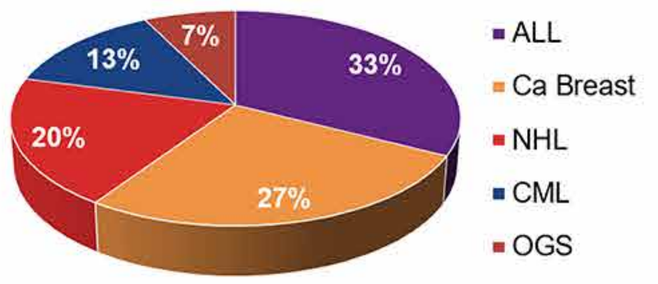
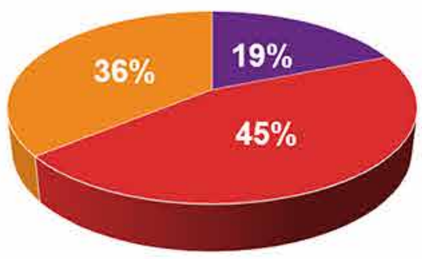
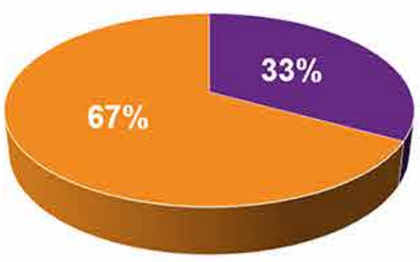
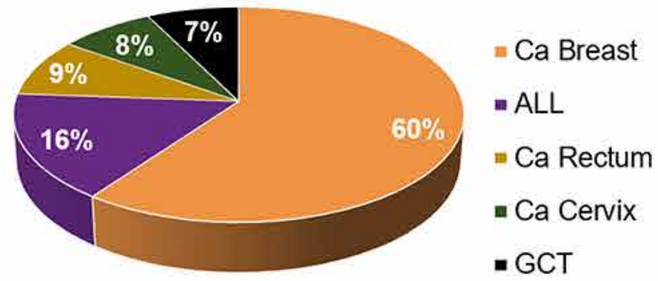
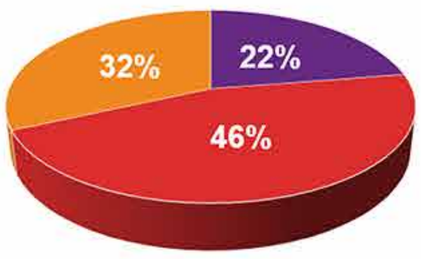
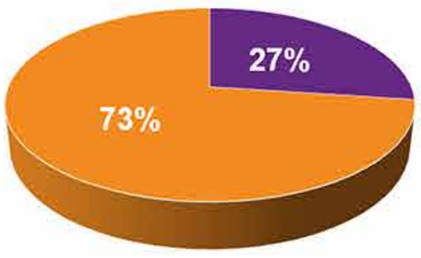
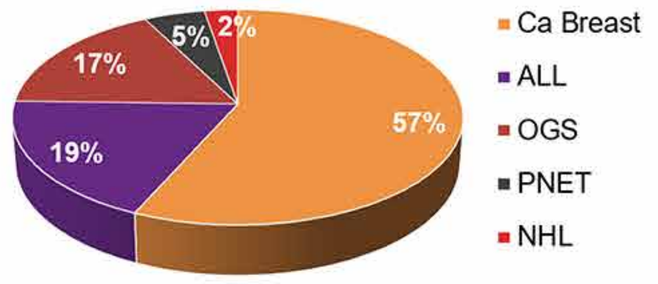
AGE

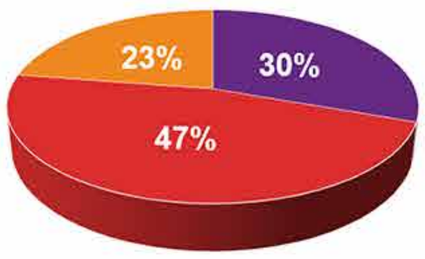
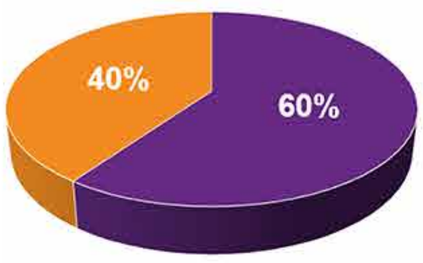
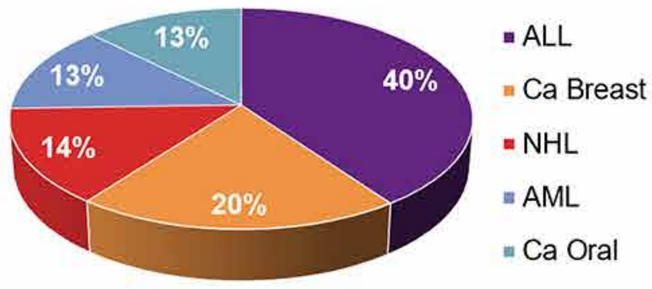
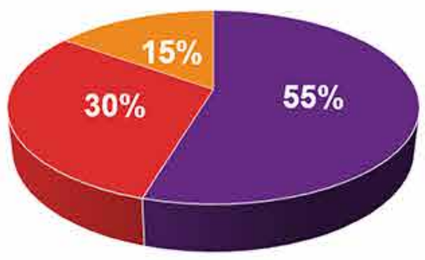
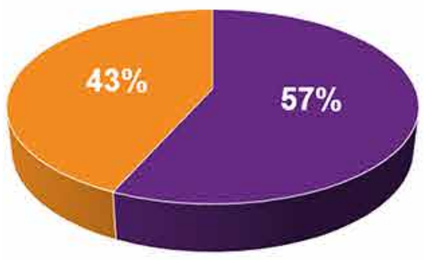
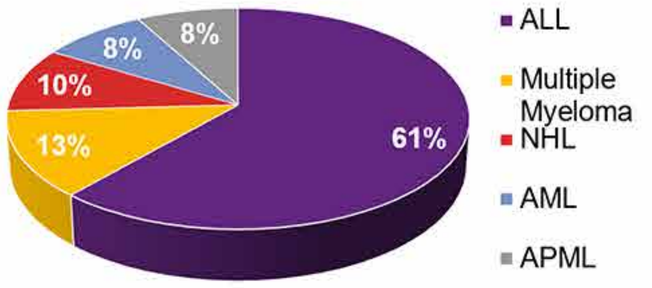
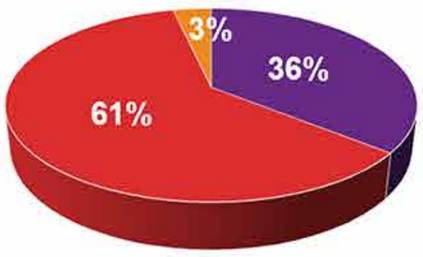
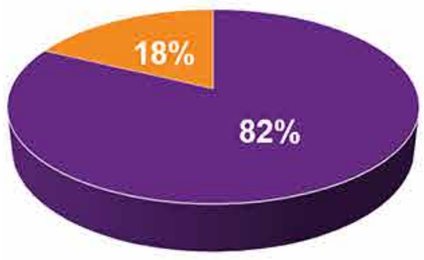
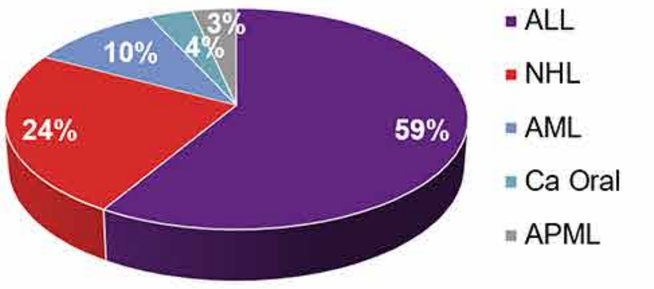
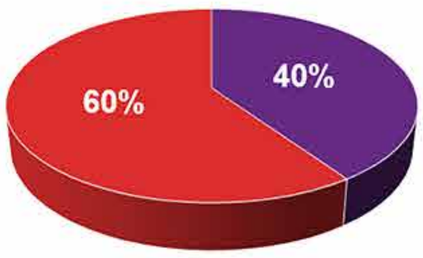
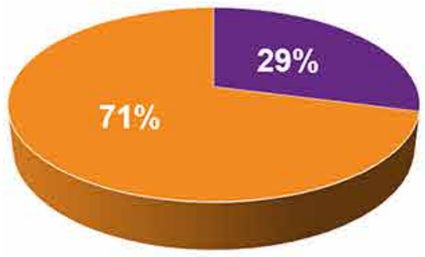
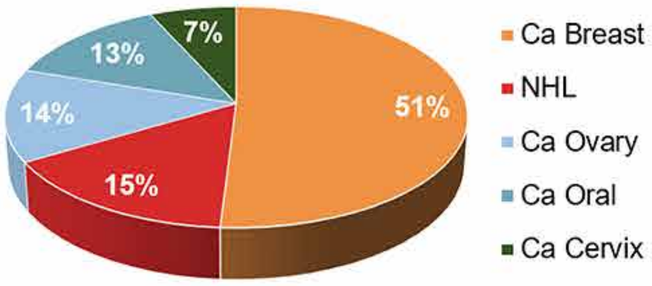
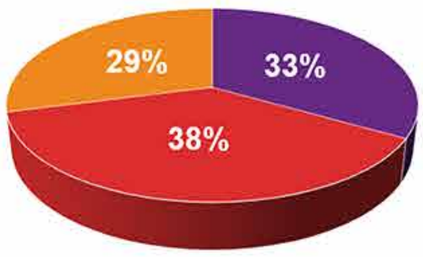
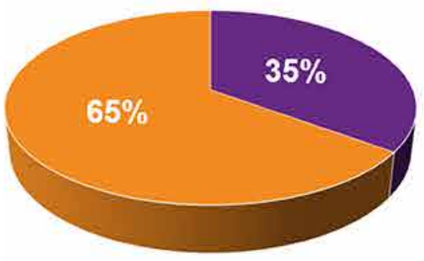
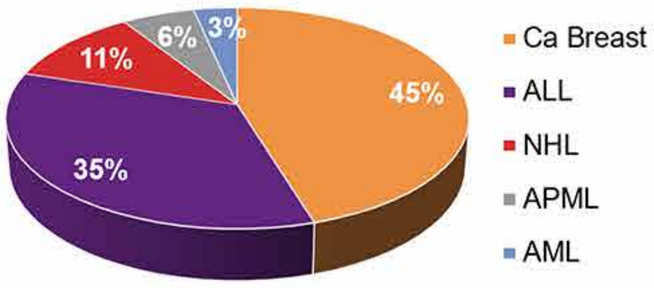
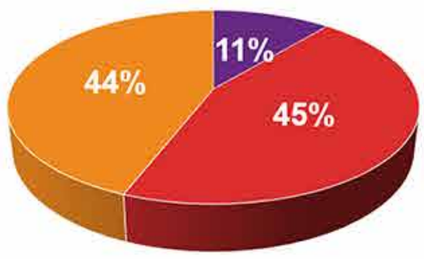
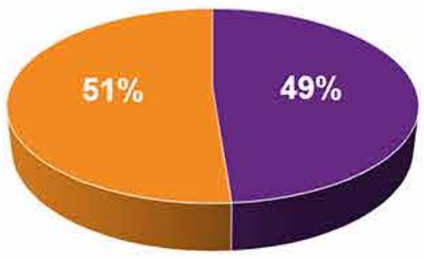
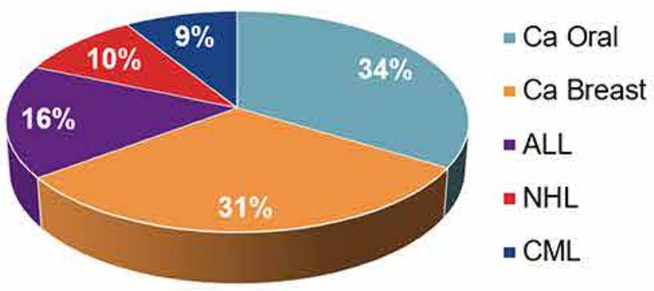
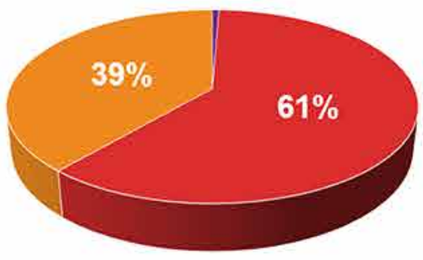
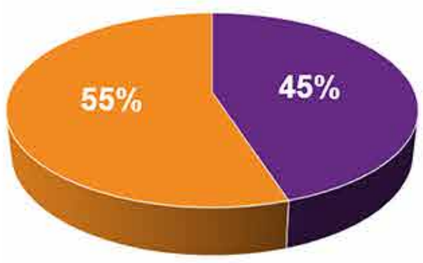
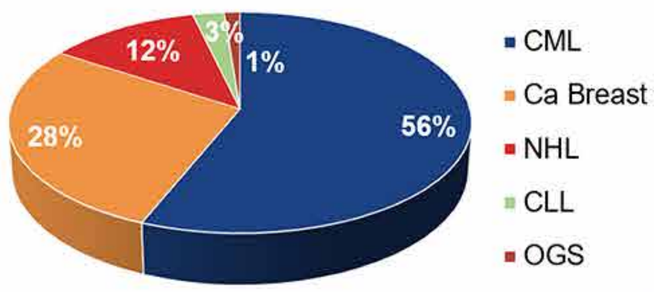


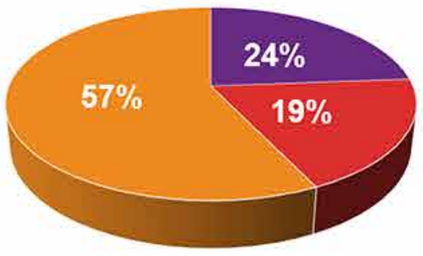
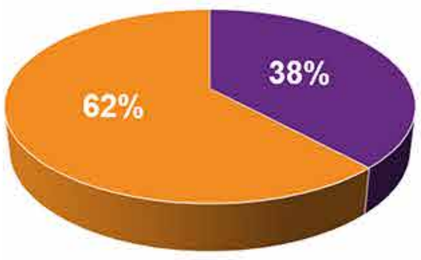
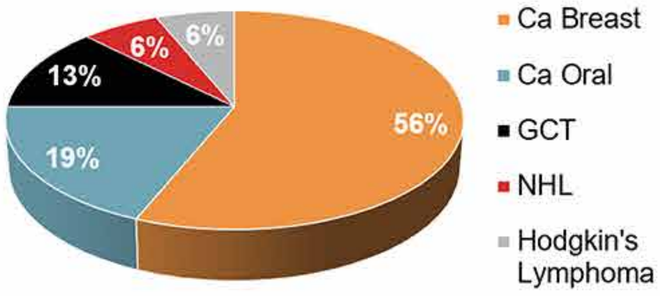
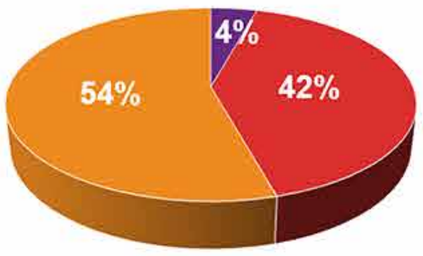
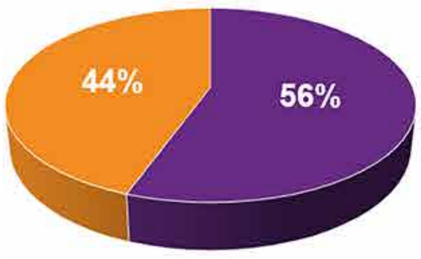
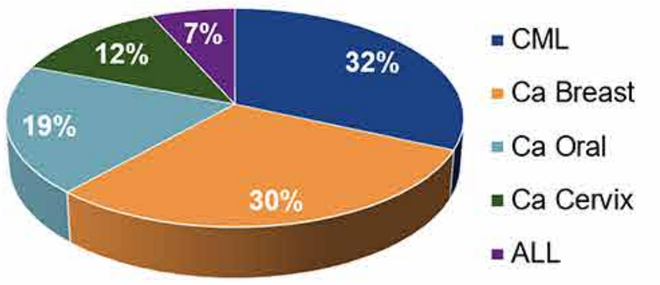
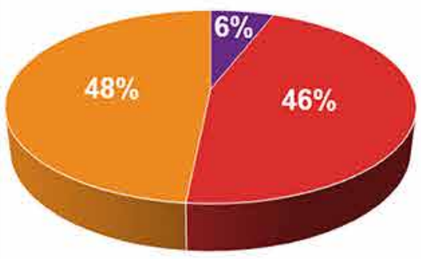
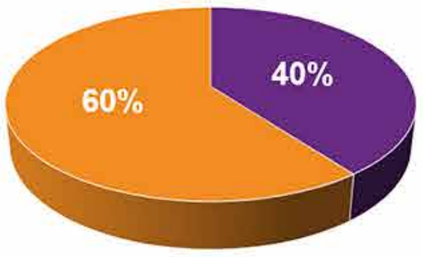
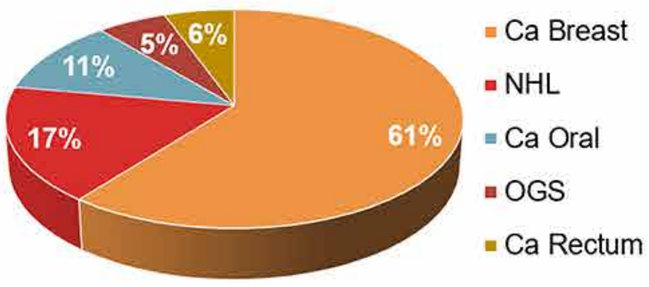
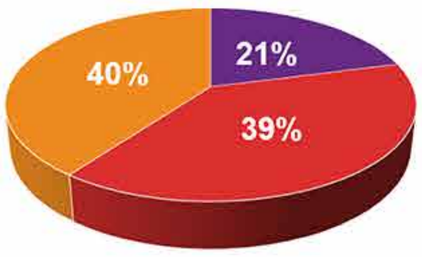
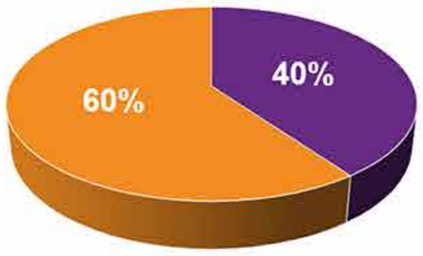
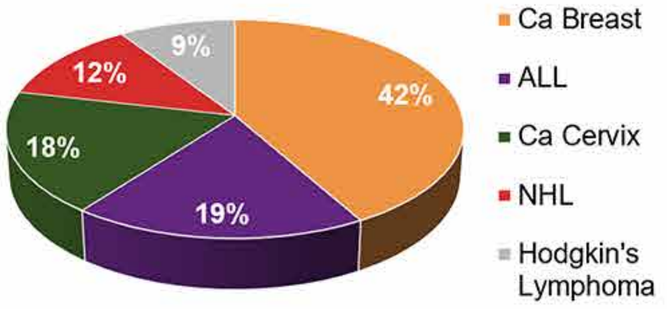
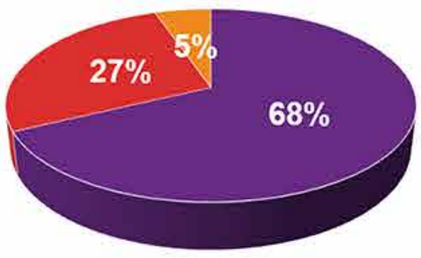
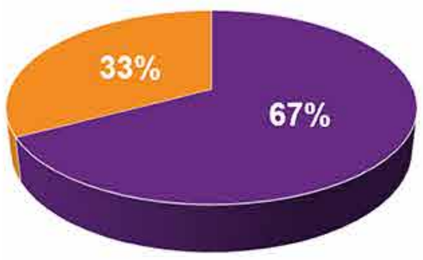
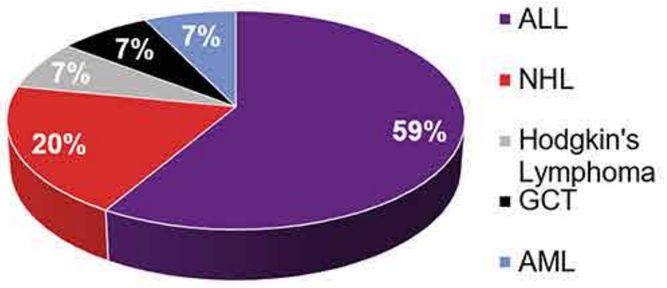
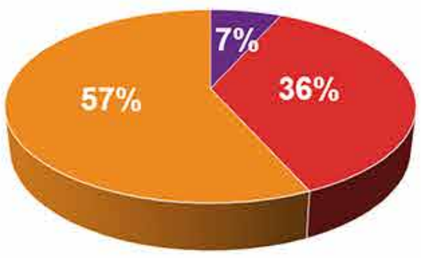
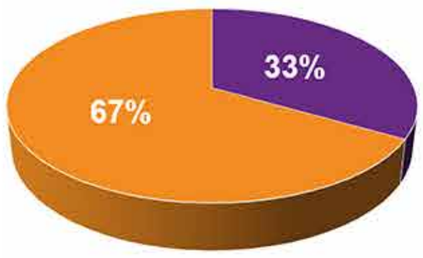
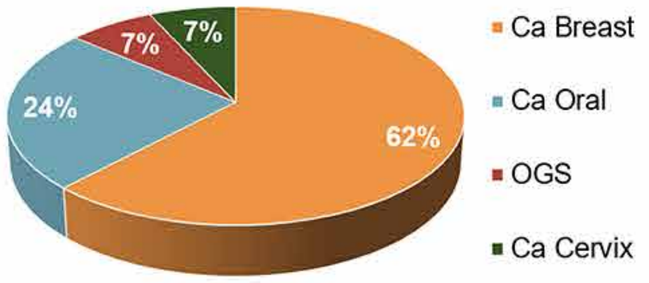
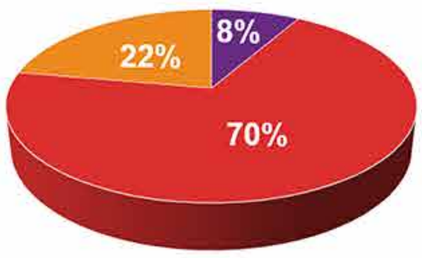
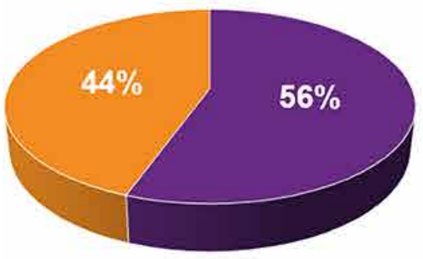
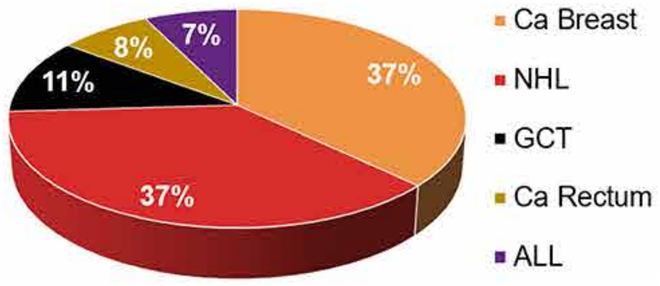
MAJOR CANCERS SUPPORTED



EMPANELLED HOSPITAL ANALYSIS TILL DEC 2021

Hospital and years with CCF	No. of forms sanct.	Amt. Disb. (Rs. in Cr.)	Age (<=15, >15 but <=45, >45)	Gender (Male, Female)	Top 5 Cancer Types supported
TMH (2011)	2,920	38.00			
RCC (2011)	639	10.73			
TMC (2011)	178	3.72			
CI (2012)	1,373	25.17			
CMC (2012)	1,382	20.34			
GCRI (2012)	237	4.28			

Hospital and years with CCF	No. of forms sanct.	Amt. Disb. (Rs. in Cr.)	Age (<=15, >15 but <=45, >45)	Gender (Male, Female)	Top 5 Cancer Types supported
RGCI (2012)	387	8.26			
SKMIS (2012)	354	3.50			
SMS (2014)	29	0.20			
BKL (2014)	283	4.00			
INDO (2015)	793	16.93			
KCH (2015)	852	15.83			
MCSRC (2015)	341	2.36			

Hospital and years with CCF	No. of forms sanct.	Amt. Disb. (Rs. in Cr.)	Age (<=15, >15 but <=45, >45)	Gender (Male, Female)	Top 5 Cancer Types supported
MSCC (2012)	23	0.41			
PATEL (2012)	184	3.18			
CCHRC (2014)	229	3.03			
SSCHRC (2014)	460	9.16			
HBCH (2015)	172	1.90			
PADHAR (2015)	30	0.28			
MPMMCC (2015)	36	0.31			
Total	**10,902**	**171.62**			

Cancer Cure Fund – Administrative Cost

CCF not only takes pride in the impact that it has created on the lives of cancer patents but more so having done it efficiently with minimum administrative cost at less than 5 per cent of the total disbursal under the project. This has implied that 95 per cent of the donation amount is utilized to support the treatment of underprivileged cancer patients.

The pro-bono services of the DDT doctors, Navya, GAC members has sustained the program and gone a long way in keeping costs low. HDFC AMC 's commitment to contribute to the administration and overhead costs has greatly assisted the ability of CCF to deliver the outcomes achieved.

I've been very avidly watching and listening to the expert opinions of all the doctors who analyse and express themselves on each application to the Cancer Cure Fund. There are some who freely give from their wealth. There are others who are extremely generous in giving their expertise, experience and best judgement. All the doctors on our DDTs fall into the latter category. Thank you, each one of you.

Mr. Kishore S Rao

Chairman,Karunashraya - Bangalore Hospice Trust
Indian Cancer Society (Karnataka Branch) and GAC Member

STUDIES

Cancer Cure (indiancancersociety.org)

- Impact of Sustainable Financial Support through ICS -CCF for treatment of childhood cancers at TMH, Dr P. Kurkure (selected for a poster presentation at SIOP 2015 in Cape Town, South Africa)

- Impact of Sustainable Financial Support through ICS-CCF for treatment of cancer patients – A model for a developing country, Dr T. Vora (presented at SIOP 2019 in Lyon, France)

- Abstract on "Enhancing impact and efficiency of financial support for Cancer through use of AI: A nascent initiative of Indian Cancer Society" Dr.Tushar Vora selected for poster presentation at SIOP 2021 in Hawaii, USA

- Subset of Enhancing impact and efficiency of financial support for Cancer through use of AI: A nascent initiative of Indian Cancer Society "on breast cancer was presented at San Antonio Breast Cancer Symposium (SABCS) 2021.

The evolution of CCF into a sustainable and successful source of financial help for cancer patients from all over the country is exemplary. The partnership between the treating hospitals and the funding sources works on the principles of trust and due diligence. With the potential of a tremendous impact on the healthcare sector of India, consolidation and expansion of the scheme is extremely essential.

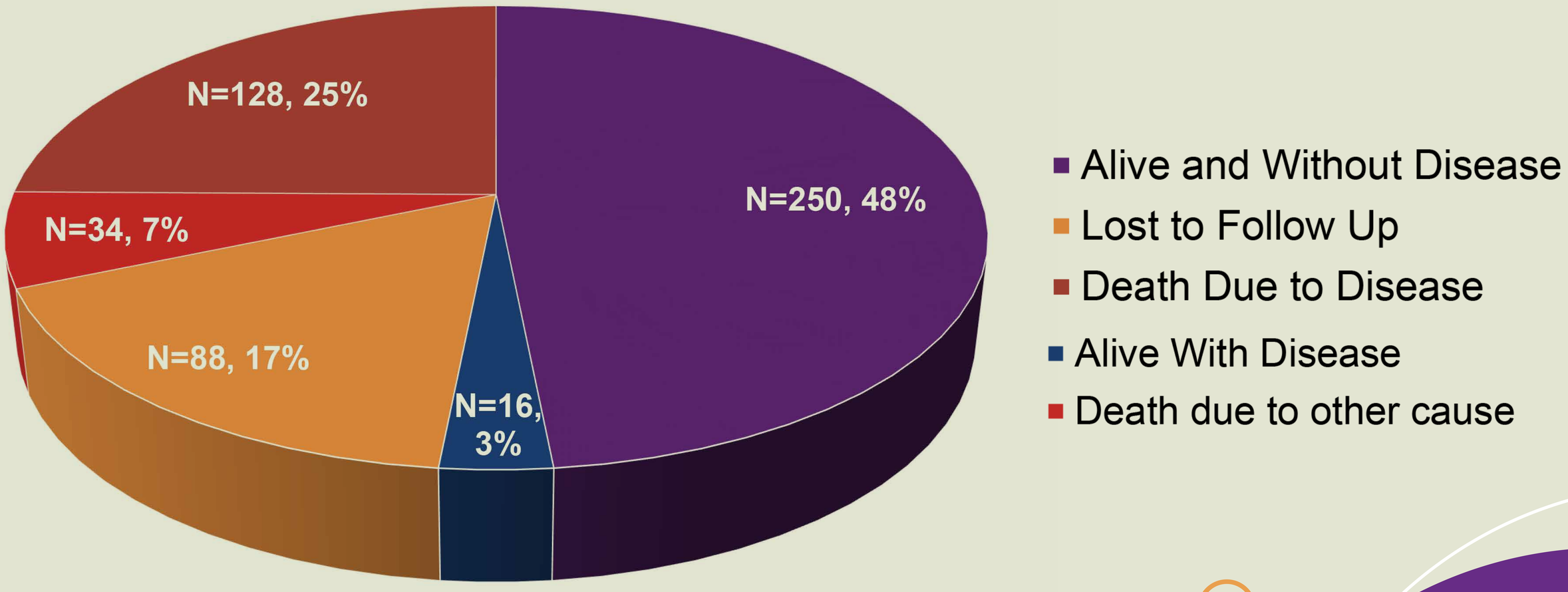
Dr Tushar Vora, MD (Pediatrics),

Princess Margaret Cancer Centre, Canada

Survival Outcome Study

In 2019, CCF undertook a scientific analysis of outcomes of 516 patients who had completed five years post treatment to validate the founding principles and objectives of the Fund. The results were presented at the Société Internationale D'Oncologie Pediatrique (SIOP) Scientific Annual Meeting in Lyon, France in 2019. It was much appreciated and the financial model was deemed worthy of worldwide replication. The study found that at a median follow-up of 5.7 years, 51 per cent of patients were alive and well enough to lead productive lives.

Status of 516 patients
At a median follow up Of 5.7 Years



WAY FORWARD FOR AFFORDABLE CANCER TREATMENT IN INDIA - SOME LEARNINGS FROM CCF

The success of the CCF model in supporting affordable and accessible cancer treatment in various parts of the country is due to an assured sustainable source of funding and efficient processes working within an institutionalised system of governance.
Based on the learnings, some suggestions for making cancer treatment affordable and accessible in India are outlined.

Philanthropy funding

Cancer treatment is a cause that tugs the heart. The scope for philanthropic funding is huge especially as government schemes cover only the bottom of the pyramid. Those above this layer too cannot fully afford the high cost of treatment. Thus, donor funds are needed to supplement their limited resources.

There are various innovative ways in which donor funds could be raised on a continuing basis.

Mutual fund model
The mutual fund model provided a sustainable source of funding as the donors are willing to look at philanthropy as an asset class.

Cancer Bond traded on social exchanges
The report on the Social Stock Exchanges referred to the option of a philanthropy bond that could be accessed on an exchange with stringent listing requirements related to the track record of the NGO. Investors could acquire a bond at the time of issue and participate in a large scalable social endeavour by a reputed NGO. Exit is possible if there is any other donor who comes in by acquiring the bond from an existing donor.

Impact Bond
Another opportunity to optimise Government allocations for cancer treatment is to visualise the Government as an outcome funder and an organisation like ICS as an implementing partner. ICS can raise philanthropy funds from impact investors to support cancer treatment from the Cancer Cure Fund in the first instance. The ICS will then seek reimbursement with full documentation from the Government for those patients who meet the criteria under Government schemes. This model can be replicated throughout the country to ensure better outcomes of budgetary funds for cancer treatment and scale up the coverage.

Patient Assistance Program

Patient Assistance Programs are very good and should be encouraged for needy patients.

- The PAPs should be more targeted and tracked for the lower income category using information technology. Also the pharma company should not offer such programs at the cost of increasing the overall drug prices.
- The current high margins being offered to distributive trade or hospital pharmacies could be reduced to pay for these programs. In fact there is a case to reduce this margin, allowed at 30% today, while maintaining trade profitability.
- There are models suggested by ICS to pharma companies to assist patients in a win-win fashion. Thus NGOs can work with pharma companies to target PAPs better.

Cancer Insurance

Presently, all the government schemes both at the central and the state level are primarily for BPL section. At present very few people are covered by insurance companies for cancer treatment because of risks, costs and complexities . Ayushman Bharat covers people form BPL section and the limit of reimbursement is only Rs 5 lakhs. Often comprehensive cost of cancer treatment cannot be covered within this amount and there is a dire need for additional support.

There is a definite need for cancer insurance to protect lower/middle income people from financial trauma and poverty . Government support for innovative and affordable insurance schemes is needed. ICS is developing a scheme along with an insurance company.

Reducing drug cost by more research on biosimilars

More research on development of biosimilars is required which could reduce the cost of drugs considerably when compared to patented foreign drugs. There are cases where the foreign drugs are potentially 80-90 times more expensive than a local option which can be developed. Government may think of setting up a research fund for this purpose. India is a leader in biosimilar and generic drug manufacture. Government has helped the industry to cope with unfair international IP locks.

Ensuring standard of care

The National Cancer Grid is a great example of collective effort led by the Tata Memorial Centre to enhance the quality of care and reduce the cost of treatment making it accessible across the country. The efforts should be supported by Government and philanthropy.

CCF acknowledges the following persons for their contribution in bringing out this brochure:

- **Nihar Vete:** Research and Script (Pro bono)

- **Rama Shankaran:** Copy Editing (Pro bono)

- **Pooja Jain & Team:** Design

ANNEX 1

Cancer Cure Warriors

The night when Mrs.Thejaswini Deshmukh, a housewife got to know that her 2 yr. son has Cancer, she wanted to kill her son, her 10 days old daughter and then commit suicide.

Today she is a Corona Warrior – working in a hospital and taking care of both her kids. When asked about the impact of ICS on their family, with a choking voice she says " jaise bachhon ko Ma se mamta aur support milti hai, ICS hamare liye woh Ma hai". "The way a child receives love and support from his/her mother so did we receive it from ICS. ICS is our mother". Ansh Deshmukh is now studying in 6th standard. Not only did he receive financial assistance for his entire treatment, his education is also being supported through the ICS Dr.Jussawala Education Project.

Narendraji is a farmer from Wadgaon village from Maharashtra's Jalgaon district. He says, "without ICS support I would have discontinued treatment...By saving one patient you have saved four families. I support my parents, my grandparents, my brother's family and my own family...It is because of ICS today I enjoy the smiles of my daughter and await my son to appear for his 10th exams".

Kaviya is working in a BPO post completion of her education as a B.Com Graduate from Chennai. Her mother, Mrs. Jayalakshmi says, "my daughter wanted to live and not die...she was prepared to go through any treatment...when the doctor said that a bone marrow transplant had to performed which would cost Rs. 3-4 lakhs, I was so broken, not knowing how to help my daughter survive. But when ICS came forward to help us with the BMT, our joy knew no bounds and the hope it offered us is immeasurable at that moment... we would never forget the timely help we got from ICS.

ANNEX 2

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Dr. Anant Gokarn

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Farzana Begum

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Ann Rawat

Janhavi Jadhav

Kanchan Dhadke

Latha Nadar

Ranjana Kasare

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Shurti Medar

Suraksha Gurav

Former Members

Former GAC Members

Start Year	End Year	GAC Members
2011	2019	Dr. Rajendra Badwe
2011	2019	Mr. Milind Barve
2011	2019	Mr.Keki Dadiseth
2011	2018	Mr. Homi Khusrokhan
2011	2015	Mr. Ajit Nimbalkar
2011	2013	Dr. Rustom Soonawala
2011	2018	Mrs. Smita Aggarwal
2011	2012	Dr. Arun Kurkure
2011	2012	Mr. Nihal Kaviratne
2012	201	Dr. Purvish Parikh
2015	2021	Mr. Uday Khanna
2017	2017	Dr.Tapan Saikia
2018	2019	Mrs. Vijayalakshmi Iyer
2018	2018	Dr. Pankaj Chaturvedi
2018	2018	Dr. C.S.Pramesh
2018	2019	Dr. S. Banavali

Former DDT Members (Mumbai)

Start Year	End Year	GAC Members
2011	2012	Dr. Arun Kurkure
2011	2019	Dr.Purna Kurkure
2011	2016	Mrs Shalini Jatia
2011	2017	Dr. Brijesh Arora
2011	2019	Dr. S Banavali
2011	2012	Dr. Jagannath
2011	2012	Dr. Paul Sebastian
2012	2016	Dr Purvish Parikh
2012	2016	Dr. Hari Menon
2012	2012	Dr. Reena Nair
2013	201	Dr Bhawna Sirohi
201	2019	Dr. Amit Joshi
201	2019	Dr.Seema Gulia
201	2020	Dr. Ashish Gulia
2016	2020	Dr. Hasmukh Jain
2018	2019	Dr. Kumaar Prabhash

Former DDT Members (Bengaluru)

Start Year	End Year	GAC Members
2017	2019	Dr Vijay Agarwal
2017	2020	Dr Vishal Rao
2017	2020	Dr. Vikram Mahiya
2017	2019	Dr Niti Raizada
2017	2020	Dr. N. Aditya Murali
2017	2020	Dr Lohlith Reddy
2017	2020	Mr.Vijay Sharma
2017	2020	Mrs.Sujatha Krishnaswamy

Annex 3

HMCPF empanelled hospitals

Hospital Name	City	State
Acharya Harihar Regional Cancer	Cuttack	Orissa
Acharya Tulsi Regional Cancer Trust	Bikaner	Rajasthan
Cancer Hospital	Agartala	Tripura
Cancer Hospital & Research Centre	Gwalior	Madhya Pradesh
Chittaranjan National Cancer Institute	Kolkata	West Bengal
Civil Hospital	Aizawl	Mizoram
Dr. B.B. Cancer Institute	Guwahati	Assam
Government Arignar Anna Memorial Cancer Hospital	Kancheepuram	Tamil Nadu
Govt. Medical College & Associated Hospital	Bakshi Nagar	J & K
Gujarat Cancer Research Institute	Ahmedabad	Gujarat
Indian Rotary Cancer Institute, (AIIMS)	New Delhi	New Delhi
Indira Gandhi Institute of Medical Sciences	Patna	Bihar
JIPMER (Pondicherry)	Pondicherry	Pondicherry
Kamala Nehru Memorial Hospital	Allahabad	Uttar Pradesh
Kidwai Memorial Institute of Oncology	Bangalore	Karnataka
MNJ Institute of Oncology	Hyderabad	Andhra Pradesh
PGIMER	Chandigarh	Punjab / Haryana
Pt. B.D.Sharma Post Graduate Institute of Medical Sciences	Rohtak	Haryana
Pt. J.N.M. Medical College	Raipur	Chhattisgarh
R.S.T. Hospital & Research Centre	Nagpur	Maharashtra
Regional Cancer Centre	Thiruvananthapuram	Kerala
Regional Cancer Control Society	Shimla	Himachal Pradesh
Regional Cancer Institute (WIA)	Adyar	Tamil Nadu
Regional Institute of Medical Sciences	Imphal	Manipur
Sanjay Gandhi Post Graduate Institute of Medical Sciences	Lucknow	Uttar Pradesh
Sher-I- Kashmir Institute of Medical Sciences	Srinagar	J & K
Tata Memorial Hospital	Mumbai	Maharashtra

Annex 4

Cancer Treatment Schemes
Below are few of the Central/State Government Schemes for supporting Cancer Treatment

Hospital Name	City	Limit	State
Cancer Patient Fund under RAN	National	2-5L	BPL patients (non govt. employees)
Ayushman Bharat Pradhan Mantri Jan Arogya Yojana	National	5 L/yr. for family	Ayushman Bharat card holders
Discretionary grants	National	50K - 1L	
Central government health scheme	National	NA	Gov employees (Cashless treatment in empanelled hospitals)
PM National Relief Fund	National	2-5L	Based on PM's discretion
CM Relief fund	All States	25K - 2L	BPL patients
RGJAY / AB -MJPJAY	Maharashtra	5L	Residents/distressed farmers of Maharashtra/ Health Card holders of RGJAY / ABMJPJAY
Aarogyasri Scheme	Telangana	2L	BPL patients
Cancer Suraksha Scheme	Kerala	50K	BPL patients (<18 YO)
Karunya Benevolent Fund	Kerala	2L	BPL patients
Karunya Swasthya Scheme	Kerala	2L	Annual family income < 3L
Sukrutham	Kerala	3L	BPL patients
CHIS Plus	Kerala	70K	BPL patients not covered by RSBY
Comprehensive Healthcare program for Schedule tribes	Kerala	10K (APL) & 50K (BPL)	NA
Financial aid from society for poor	Kerala	50K	BPL Patients
Mukhyamantri Amrutam	Gujarat, Tamil Nadu, Rajasthan & Madhya Pradesh	2L	Annual income < 1.2L / U-win card holders

Hospital Name	City	Limit	State
Vajpayee Arogashree	Karnataka	1.5-2L	BPL patients
Rajeev Aarogya Bhagya	Karnataka	1.5-2L (co-payment)	Above poverty line patients
Jyothi Sanjeevani Scheme	Karnataka	NA	State govt. employees
Mukh Mantri Punjab Cancer Raahat Kosh	Punjab	1.5L	Residents of Punjab
Discretionary fund for Jalpaiguri, Darjeeling & South Dinajpur	West Bengal	2L @ INR 100 / yr (free for BPL patients)	BPL patients
Swasthyasathi	West Bengal	5 L /yr. /family	Swasthyasathi card holder
Atal Amrit Abhiyan	Assam	2L	Annual family income <
Arogya Nidhi	Assam	1.5L	BPL patients
Rajiv Arogyasri	Andhra Pradesh	1L	BPL patients
Khubchand Baghel Swasthya Sahayata Yojana 2021	Chattisgarh	5-20 L	BPL patients
Biju Swasthya Kalya Yojana	Odisha	5L / yr for family & 7L for women members	Annual income <50,000 for rural & <60,000 for urban
Chief Minister Comprehensive Health Insurance Scheme	Tamil Nadu	2L @ INR 100 / yr	Annual family income < 72K
ABPM JAY Sehat Health Insurance Scheme	J&K	5L/yr. for family	All resident of J&K
Bihar Swasthya Suraksha Samiti	Bihar	5L/yr. for family	Card Holder
Atal Ayushman Uttarakhand Yojana	Uttarakhand	5L/yr. for family	Card Holder

Hospital Name	City	Limit	State
Himachal Pradesh Swasthya Bima Yojana	Himachal Pradesh	5L/yr. for family of 5	Card Holder
Senior Citizen Health Insurance Schemes	Himachal Pradesh	No limit	60 yrs. & above, annually Rs.500 has to be paid, Cardholder
Jharkhand Ayushman Bharat Mukhyamantru Jan Arogya Yojana	Jharkhand	5L/yr. for family	Card Holder
Tripura Health Assurance Scheme for Poor	Tripura	1.15 L	Families annual income less than 1.5L
Megha Health Insurance Scheme	Meghalaya	2L for family of 5	Nominal policy amount to be paid, Card holder

The above table is indicative and not exhaustive

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Annex 5

PRIME DONORS

Investors of HDFC Mutual Fund and HDFC Asset Management Company Ltd

Bharat Petroleum Co. Ltd	**Clearing Corporation of India Ltd.**	Aditya Birla Capital Foundation	STCI Primary Dealer
Indiabulls Housing Finance Ltd.	State Bank of India	HDFC Ltd	Exide Industries Ltd
HDFC Bank Ltd	Reliance Industries Ltd	Balkrishna Industries Ltd	STCI Finance Ltd
Bank of India	Vijaya Bank	Axis Bank Ltd	Union Bank of India
Revati Narayan	Dilip S Sanghvi	SBI Foundation	

Some important milestones in the CCF

2011
- Launch of HDFC Debt Charity Fund for Cancer Cure
- 3 hospitals empanelled

2012
- 5 hospitals empanelled
- Server based software developed

2014
- 2 hospitals empanelled

2015
- 5 hospitals empanelled
- Poster presentation at SIOP, South Africa

2016
- Income limit from Rs. 1 lakh to Rs. 2 lakh
- 1 hospital empanelled
- Patient information migrated to Web based software

2017
- TMC, ACTREC, Kharghar Mumbai and the Bengaluru DDT set up
- 1 hospital empanelled and 1 disempanelled

2018
- Income limit Rs. 2 lakh to Rs. 4 lakh
- Treatment support - Rs. 4 lakh to Rs. 5 lakh and Rs.8 lakh for BMT
- Rigorous hospital follow up to refund unutilised funds.

2019
- 2 hospitals empanelled and 2 disempanelled
- Bharat Petroleum Corporation Limited significant donor
- Poster presentation at SIOP France
- Hospital audit initiated

2020
- Navya support included in the MOU with hospitals
- Patient consent form modified as per ICS Ethics Committee
- Anonymising patient identity for teams outside CCF
- Online submission of patient forms and reports by hospitals
- CCF software can be accessed anytime anywhere

2021
- Benchmarking the cost of treatment
- Checklist used by hospitals for filling up applications
- Virtual Poster presentation at SIOP and SABCS

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