



100 BED CANCER HOSPITAL

TIRUNELVELI

Project Concept Report

July2012



New No. 4, Old No. 23, II Floor, C.P.Ramaswamy Road, Alwarpet, Chennai 600 018 www.ncrcl.com



Healthcare Management Solutions

No. 1A, 2nd Street, Dr.Tirumurthy Nagar, Nungambakkam, Chennai 600 034 www.hsbconsulting.com



Executive Summary

Udhavum Ullangal's (UU) 100-bed Cancer care and prevention Project from Tirunelveli aspires to provide Cancer patients and the chronically/ terminally ill people, easily accessible quality healthcare services through integration of oncology and palliative care. Towards achieving this goal, UU has already invested in equipments, Ambulance and trained staff from Cancer Institute(WIA) and commenced cancer screening and Cancer education program from 2010.

The hospital seeks to provide specialty services such as, Medical, Surgical & Radiation Oncology, Palliative Care, Paediatric Cancer Care, Pain Management, and support services. A state of the art Lab for Bio-chemistry, Microbiology, pathology and haematology will also form part of the Hospital.The hospital would have separate Geriatric, Male, Female and Paediatric wards. The hospital is projected to serve roughly about 7,200 out-patients and 2,500 in-patients annually. The hospital is aimed at serving the need of the community and will be run on a not-for-profit basis.

UU existing network of Doctors and Cancer institute will ensure that the physicians required to support this engagement will be available. They include full time salaried doctors, consultants on retainer ship basis and visiting consultants.

The project involves construction of a day-care clinic and a 100 bed hospital in Tirunelveli district which would also cover Kanyakumari, Tuticorin and Virudhunagar districts where there are no specialised cancer care centers. The hospital will offer affordable and quality services for cancer patients. The commencement of a cancer care hospital in Tirunelveli would enable easy access to Cancer patients in the area and nearby districts.

The day care clinic is estimated to come up in a floor space of 6,000 square feet at an estimated project cost of INR 2.75 Crores to be funded by volunteers and supporters. The hospital is estimated to have a built up area of about 40,000 square feet on 5 acres of land, at an estimated total project cost of INR 30.61 Crores that is to be funded by grants and donations. The hospital will cater to the needs of the patients with 6 Out-Patient Consultation Rooms, 4 Operation Theatres and 100 In-Patient Beds of which 28 will be transit beds and 72 operational beds.

This green field hospital project is expected to be completed and ready for operations within two years from the commencement of the project, the out-patient clinic will however, be operational within 3-6 months. There is a need for a modern cancer care hospital providing affordable treatment to bridge the demand gap that is currently not addressed by the existing government, private and social sector hospital.







Table of Contents

Exe	Executive Summaryi				
1.	1. Introduction				
1	L.1.	An overview of Cancer & Palliative care in India			
2.	Udh	avum Ullangal4			
2	2.1.	Team Profile6			
3.	Hos	pital Project9			
	3.1.	Project Overview9			
	3.2.	Project rationale9			
F	Role o	f Udhavum Ullangal in Cancer Care12			
	8.3.	Location and Communities served by the proposed project12			
4.	Hos	pital Facilities			
Z	ł.1.	Overview			
Z	1.2.	Medical Specialties & Services			
Z	1.3.	Classification of beds14			
Z	1.4.	Patrons & professionals supporting the project16			
5.	Proj	ect Financials			
Ę	5.1.	Project cost and funding envisaged20			
6.	Imp	lementation Plan			







1. Introduction

1.1. An overview of Cancer & Palliative care in India

Each year, cancer affects more than 10 million people worldwide, and kills 6 million. Without effective control of the disease, these figures will increase significantly, with the most marked rise occurring in the developing countries. According to a study published by *The Lancet* (March 2012) ~5.56 lakh cancer deaths (6% of all deaths) were reported in India in 2010, with over 71% of the deaths being in the productive age group 30 - 69 years. The research also showed that contrary to popular belief cancer affects people equally in both rural and urban areas.

Tamil Nadu had the 5th highest incidence of cancer deaths among the Indian states. It has been reported that tobacco usage accounted for 42% of cancers among men, and 20% among women. This indicates that most of the cancers in India are preventable with lifestyle modification. There is a need to focus on creating greater awareness on the harmful effects of tobacco usage.

India lags behind other developing nations in many health categories, including infrastructure to provide medical care for cancer patients. Healthcare in India has to be viewed in the backdrop of unregulated growth of the private sector and limited public healthcare facilities leading to a near-total eclipse of availability and accessibility of universal and comprehensive healthcare.

The biggest impediments to dealing with the high incidence of cancer in India are – inadequate medical infrastructure for cancer screening & treatment, the lack of awareness amongst the general public and very high cost of treatment which makes it inaccessible to large sections of the population. The delay in diagnosis leads to increase in mortality and ~80% of cancer patients present with advanced stage of the disease thereby requiring palliative care.

The public sector hospitals are more widespread (around 60%), but the budgetary allocation of <1% of the GDP, is insufficient to even service the existing infrastructure. The private sector has been growing for the last 15 years and accounts for an estimated 95% of new hospital beds that have been added in this period. While the affluent and the urban middle-class with a capacity to pay have been catered to by the mushrooming





Private healthcare providers and Corporate Hospital Groups; the economically weaker sections of the society are dependent on the trust hospitals and NGOs.

Not-for-Profit Trust hospitals established by various NGOs, Missionaries and religious groups have a significant presence in India and have over the years played a key role in bridging the healthcare gap particularly for the under-privileged. The healthcare trusts infrastructure is very wide and ranges from 5-bed nursing homes to 1000-bed teaching and super-speciality hospitals. Some of the most respected healthcare organizations in India like the Tata Memorial Hospital - Mumbai, Adyar Cancer Hospital - Chennai, Christian Medical College - Vellore, and Sri Satya Sai Trust Hospital - Bangalore are all run by various trusts with a non-profit motive.

However, there exists a huge demand-supply gap particularly in the field of cancer care in India. There is a pressing need to increase the number of cancer hospitals in the country particularly in the non-metro cities where the population suffers due to lack of awareness and non-availability of cancer hospitals.

The healthcare services in the district are predominantly centred on the Tirunelveli Medical College. There are many small and medium sized hospitals in the district which provide secondary care. There is a cobalt therapy unit in the medical college, however it is not able to meet the demand in the region owing to equipment break-downs and lack of qualified manpower. People in the district are dependent on Madurai or Chennai for their healthcare needs.

Udhavum Ullangal proposes to establish a 100 bed green field Cancer & Palliative Care Hospital with Medical, Surgical and Radiation Oncology facilities. The hospital is to be located in Tirunelveli at an estimated project cost of **INR 33.36 crores**. The project will be a not-for-profit hospital and self-sustained with cash generated from its operations. The proposed hospital will serve the districts of Tirunelveli, Kanyakumari and Tuticorin and Virudunagar, where there are no specialized cancer care centres.

2. Udhavum Ullangal

Udhavum Ullangal established in the year 2000, is a charitable trust started by Mr. B Sankar Mahadevan. The objectives of the trust include providing medical and educational assistance, organizing health awareness programmes, organizing festivals and special days







with orphan, destitute and differently abled children, rendering timely help during disasters and crisis, mobilizing like-minded people to build a socially conscious selfless society.

The Tirunelveli Cancer Prevention Centre is a successful project. The screening and cancer education programmes are conducted by personnel trained by Cancer Institute(WIA) and is supported by Udavum Ullangal. For this purpose, Udhavum Ullangal has entered into a partnership with Krishna Hospital for providing these screening facilities in the region. This project is being funded by the Cognizant Foundation as a part of their corporate social responsibility initiatives.

In the last 6 months (the project was inaugurated on 2nd October 2011), 20 awareness camps attended by 40 persons at each camp and 7 screening centres with attendance of 30 on an average have been held. So far 768 persons have benefited from the project. Cancer and pre cancers diagnosed have been admitted or being counselled for cancer treatment.

Activities of the Trust

- Continuing Medical Education programme on Cancer prevention and Management in South in coordination with Dept. of Public Health, Govt. of Tamilnadu, every year.
- Cancer Awareness and Screening Camp in association with Cancer Institute, Adyar, Blindness control Camp for School Children in coordination with Sankara Nethralaya.
- Constructed a School Building at a cost of Rs.17,00,000/- in a remote village -Keezhakundalapadi near Chidambaram with the support of Accenture. Constructed Toilets and infrastructure facilities for many schools.
- Constructed Smart Classroom, a method of learning through audio visual technology, provided in Viswa Vidyalaya School near Vandalur.
- Provided educational assistance every year to the children of Visually-impaired, Disabled, Widow, deserted women and poor.
- Conducts Mentorship programme for these children to keep the focus on students in education through constant monitoring by our volunteers.
- Conducted Yoga, Spoken English, Computer Classes and Summer Classes to Less Fortunate Children of Adi Dravida School and Government Girls High School, T Nagar.
- Started Skill Development Project at Nanmangalam in which 60 Students are learning Computer, Tailoring and Beautician course with the support of Accenture.
- Constructed a Computer Lab with three computers to a rural School at Madhanam near Chidambaram







- Nourishment to 500 School children by providing milk and breakfast. Supply of Monthly Provisions to 125 families of Leprosy affected persons and visually-impaired throughout Tamil Nadu since 2008.
- Coordinate with the Collectorate of Virudhunagar District to support the Higher Education of Child Labour and Underprivileged Children, who are studying in NCLP Schools and other Regular Schools.
- Udhavum Ullangal is a certified NGO by Charity Aid Foundation, New Delhi. It has FCRA and 80G certifications. It has also applied for Section 35AC exemption.

2.1. Team Profile

2.1.1. Mr. B. Sankar Mahadevan - Founder

Occupation: Ex-Banker

Age: 55 years

Mr .Mahadevan has an inner drive to help people in need.

In 2000, he started Udhavum Ullangal as a result of this drive, and it is because of this drive that he has resigned his job very recently and devotes full time to the organisation.

Experience

- Mr. Mahadevan is a key figure at Udhavum Ullangal, playing a central role in planning, coordinating, and executing projects
- He is a trustee of CIOSA (Confederation of Indian Organisations for Service and Advocacy)
- He is a trustee of the Federation of Tamil Nadu Handicapped Association Trust
- He is a community member (and regular donor) of the Association of Voluntary Blood Donors
- He is a project committee member of the Indian Red Cross Society
- In association with the Indian Red Cross Society, he actively participated in the collection of relief materials during disasters like the Orissa cyclone (1999) and the Gujarat earthquake (2001)









2.1.3. Mr. R. Santhanam - Trustee

Occupation: 25 years as a Draughting Officer in the Public Works Department, Govt. of Tamil Nadu Age: 54 yrs



Project Concept Report

Mr. Santhanam helped with the 1998 Ananda Deepavali celebrations and was so inspired by the selfless service to the society that he joined Udhavum Ullangal when it started in 2000. He has been a trustee ever since and a part of the core team.

Experience

- In 2004, he was a part of 11 programmes on environmental awareness in various rural areas of Tamil Nadu in collaboration with CPR Foundation (C. P. Ramaswamy Foundation), Alwarpet.
- He donates blood often, helping to save lives.
- He regularly visits an old aged home in Nanmangalam and an orphanage home in Koilambakkam. He has a special concern for both orphaned children and the elderly, and has observed that in many ways the needs of both groups are similar.
- His vision is that "the government should adopt the orphaned children and elderly and bring all of them under one roof, create a connection between the generations and take care of them in a homely atmosphere."

2.1.4. J. Premalatha - Trustee

Occupation: Social Worker in the Madras Voluntary Blood Bureau since 1991 Age: 41 yrs



Ms.Premalatha has always wanted to serve. She is able to do

this as part of her job - motivating and mobilizing donors for voluntary blood donation; but it was at the 1998 Anandha Deepavali celebrations that she realized that there was great potential to serve the downtrodden. As a result, she joined Udhavum Ullangal as a trustee when it was formed in 2000.







2.1.5. S. V. G. Subramaniam - Trustee

Occupation: In-charge, Eye Bank at Sankara Nethralaya **Age:** 41 years

From his college days Mr. Subramaniam has been involved

in the noble cause of blood donation. Now, as part of his job, he is actively involved in organizing blood donation camps and emergency blood donors for patients in different hospitals.

As with the other trustees, joining Udhavum Ullangal was a result of being inspired by the 1998 Anandha Deepavali.

2.1.6. Mr. M. Ramesh Kumar - Trustee

Occupation: Sr. Vice President (Founder) – eNoahi Solution India Pvt. Ltd

Age: 50 years

Mr. Ramesh is associated with Udhavum Ullangal since 2002.

He has been discharging his corporate social responsibility through Udhavum Ullangal while working with Ford Motor Company.

Experience

- He is a Finance professional with strong experience in working in corporates like Ford & Unilever
- Key responsibilities at UdhavumUllangal include:
 - o Raising funds for UdhavumUllangal through corporates
 - Support in identifying and getting volunteers from Corporate for projects
 - Ensure strong governance and controls are established
 - Provide support as volunteer to some of the projects





Project Concept Report







3. Hospital Project

3.1. Project Overview

Udhavum Ullangal is working to set up a 100 bed comprehensive Cancer Hospital with a multidisciplinary approach to cancer treatment. The proposed location of the hospital is Tirunelvelli which is an ancient city located in the southernmost tip of the Deccan plateau.

The proposed hospital will serve the districts of Tirunelveli, Kanyakumari, Tuticorin and Virudhunagar, where there are no specialized cancer care centers. The hospital will offer affordable and quality services for cancer patients.

3.2. Project rationale

One in eight deaths worldwide is due to cancer. Worldwide, cancer causes more deaths than AIDS, tuberculosis, and malaria combined. Cancer is the second leading cause of death in economically developed countries (following heart diseases) and the third leading cause of death in developing countries (following heart diseases and diarrhoeal diseases). The burden of cancer is increasing in developing countries as childhood mortality and deaths from infectious diseases decline and more people live to older ages. Further, as people in developing countries adopt western lifestyle behaviors, such as cigarette smoking, higher consumption of saturated fat and calorie-dense foods, and reduced physical activity, rates of cancers common in western countries will rise if preventive measures are not widely applied.

Global Trends in Cancer Incidence and Mortality

Factors that contribute to regional differences in the types or burden of cancer include regional variations in the prevalence of major risk factors, availability and use of medical practices such as cancer screening, availability and quality of treatment, completeness of reporting, and age structure. Currently, two of the three leading cancers in men (stomach and liver) and women (breast, cervix and stomach) in developing countries are related to infection. Stomach cancer continues to be the most common infection-related cancer worldwide, followed closely by liver and cervix.





Trends in Cancer in Asia

In 2002, 4.2 million new cancer cases— 39% of new cases worldwide—were diagnosed among 3.2 billion persons (48% of the world population) living in the fifteen most highly developed countries in South, East, and Southeast Asia: Japan, Taiwan, Singapore, South Korea, Malaysia, Thailand, China, Philippines, Sri Lanka, Vietnam, Indonesia, Mongolia, India, Laos, and Cambodia. China and India, together accounting for 37% of the worldwide population, reported 3 million of these newly diagnosed cancer cases.



Figure 1: Distribution of Cancer in Asia Source: Burden of Cancer in Asia: Pfizer Report

The Indian Scenario

India is estimated to have 2.5 million cancer patients with 1 million new cases detected every year. Cancer, Cardiac and Diabetes collectively accounted for 13 % of the hospitalization cases and are estimated to increase to 20.0 % by 2016.Over 5.56 lakh patients die of cancer each year of which at least 1/3 could have been saved with timely medical intervention, awareness and early diagnosis.

Forty-one percent of all new cancers diagnosed in males occur in fifteen Asian countries. India, which has about 18% of the world's population, accounts for 7% of new cancer cases in males and 9% in females as shown in **Figure 3**



Figure 2: Total New Cases of Cancer- Male

Source: Burden of Cancer in Asia: Pfizer Report







Tamil Nadu

Tamil Nadu which is known as the healthcare capital has also not done enough when it comes to infrastructure for cancer treatment. The government cancer facilities are woefully inadequate with only 2 centres (Chennai & Madurai). The corporate sector has only 2 facilities (Chennai & Coimbatore), while the Trust Hospitals/ NGOs account for 3 cancer hospitals (Chennai, Vellore & Madurai).

There are 3 major cancer centres in Tamil Nadu – Adyar Cancer Hospital, CMC Vellore and Apollo Hospitals, which cater to patients from across India and neighbouring Sri Lanka are not sufficient to provide cancer care to its population. However, there is no cancer registry system presently. Cancer screening is now being slowly started in Tirunelveli.

Table 2 gives the projected cancer numbers in Tamil Nadu by Sex. It is estimated that about 53,000 people will be affected by Cancer in the period 2012-2016 in Tamil Nadu. Out of this, 45.3% is expected to be males and the balance of 54.7% is expected to be females.

Table 1: Projected Cancer Statistics in Tamil Nadu by Sex for 2012-16

Item	Total	%
Men	24 771	45.3
Women	29 863	54.7

Source: Trends in cancer incidence in Chennai city (1982–2006) and statewide predictions of future burden in Tamil Nadu (2007–16), R.Swaminathan et.al, National Medical Journal of India Vol 24, No. 2, 2011

Table 3 shows the age-wise projected cancer numbers in Tamil Nadu. It is expected thataround 89% of the cancer patients will be more than 35 years old.

Table 2: Age Wise Cancer	Numbers	projected	for 2012-2016
--------------------------	---------	-----------	---------------

Age Bracket	Total	%
0-14	1320	2.4
15–34	4346	8.0
35–64	34 809	63.7
65–98	14 159	25.9

Source: Trends in cancer incidence in Chennai city (1982–2006) and statewide predictions of future burden

in Tamil Nadu (2007–16), R.Swaminathan et.al, National Medical Journal of India Vol 24, No. 2, 2011





Role of Udhavum Ullangal in Cancer Care

Udhavum ullangal has been involved in social and charitable activities ever since its formation in the year 2000. Some of the key achievements of the trust over the past few years are given below:

- ✓ Continuing Medical Education programme on Cancer prevention and Management in South in coordination with Dept. of Public Health, Govt. of Tamilnadu, for two consecutive years. Now they are running a Cancer Prevention Centre at Tirunelveli in coordination with Cancer Institute, Adyar and Krishna Hospital, Palayamkottai to create awareness, education and screening.
- ✓ Udhavum Ullangal has also been involved in conducting a population based cancer screening.
- ✓ Cancer Awareness and Screening Camp in association with Cancer Institute , Adyar
- ✓ Cancer Prevention Center at Tirunelveli with the guidance of Cancer Institute.
- ✓ Dr.K.S.Sanjivi awards to Doctors doing community service in association with Ekam Foundation and getting free treatment for poor patients.

3.3. Location and Communities served by the proposed project

The 100 bed cancer treatment facility is proposed to come up in the Tirunelveli district of Tamil Nadu. This district would cater the needs of the Tirunelveli city, Kanyakumari, Virudhunagar and Tuticorin.

Tirunelveli: As of 2011 census of India, Tirunelveli had a total population of 4,74,838. Males constitute 49% of the population and females 51%. The city has an average literacy rate of 78%, higher than the national average of 59.5%: male literacy is 83%, and female literacy is 73%.

The city covers an area of 108.6 square kilometres. The population density of the city had increased to 3781 persons per km² in 2001 from 2,218 persons per km² in 1971.

Presence of women beedi rollers in the district and the scarcity of cancer care in these areas make Tirunelveli the area of focus for cancer treatment.

Kanyakumari: Kanyakumari is the southernmost town of the Indian mainland. The land mass in and around the town is hilly and uneven, with many commercial buildings and hotels at the upper crest of the land mass with the sea visible below. The old areas of





the town, where the local population lives, are on the lower side. Many of the locals carry out fishing, fish processing and other maritime professions. Tourism is one of the main activities of the town; and many locals are employed in shell-craft and other tourism-related businesses. It has a literacy rate of 98.6%. 40% or more are college degree holders.

Tuticorin: Tuticorin is also known as 'Pearl City'. It is a commercial seaport which serves the inland cities of Southern India. About 50.15 percent of the total population in Tuticorin live in the urban areas.

Virudhunagar: Virudhunagar is the business hub of South India. Most of the goods produced in the region are exported to other countries.

4. Hospital Facilities

4.1. Overview

The hospital will be an Exclusive Cancer care Super-Specialty, mid-sized hospital. It will provide comprehensive services to cover all the health care needs of the Cancer patients. The facilities include spacious green cover, alternative treatments such as yoga, Pranic healing, music therapy etc.

4.2. Medical Specialties & Services

The Cancer & Palliative care hospital will provide facilities as detailed below:

Diagnostics & Treatment

- Radiology & imaging services Linear Accelerator, Brachy Therapy, Digital X-ray, Mammogram, Ultrasound, Endoscope, CT-Scan, EEG, ECG, Echo Doppler.
- ✓ State-of-the-art Lab for Bio-chemistry, Microbiology, Pathology & Haematology.
- ✓ Blood bank for collection and storage of blood & blood components.
- ✓ Paediatric Cancer Care
- ✓ Laminar Hood

Ambulatory Care Services

- ✓ Critical Care
- ✓ Emergency Care
- ✓ ICU
- ✓ Lab Medicine







✓ Operation Theatres - 4

Medical Support Facilities

- ✓ Consultation Rooms (6 nos)
- ✓ Ambulance (2 nos)
- ✓ Cold (Body) Storage
- ✓ Medical Records
- ✓ Pharmacy (OP & IP)
- ✓ Counselling Room
- ✓ Physiotherapy

Support Service

- ✓ CSSD
- ✓ Engineering & Maintenance
- ✓ Canteen
- ✓ Front Office (Admissions & Reception)
- ✓ House Keeping
- ✓ IT

Administrative Services

- ✓ Finance & Secretarial
- ✓ HR
- ✓ Materials
- ✓ Security
- ✓ Dormitory for attenders and RT patients
- ✓ Grievance cell

4.3. Classification of beds

- The hospital will have a capacity for 100 beds of which 28 will be transit beds and 72 operational beds.
- ✓ The beds will be broadly classified into beds in the wards and Transit beds that include Emergency, ICU, Isolation and Palliative care beds.
- \checkmark The bed allocation break-up is given below







Table 3: Bed Classification

Bed Classification	No of beds
A. Transit Bed	28
Emergency	5
Isolation	3
ICU	10
Palliative Care Beds	10
B. Other beds	72
Geriatric Ward (Senior Citizens)	10
General Wards (Male)	10
General Ward (Female)	12
Paediatric General Ward	8
Semi Private	20
Private	10
Deluxe	2







4.4. Patrons & professionals supporting the project

The following table summarizes the profiles of the various patrons and professionals involved in this project:

Name	Qualifications	Specialization	Experience & Achievements	Proposed Role in the
				Project
Dr. Shantha	MBBS	A well renowned cancer	Currently the chairperson of the Adyar cancer institute	Chairman to the
	MD	specialist who has received	Awarded the Padma Shri award for her contribution in	Advisory Committee
		numerous awards for her	the field of cancer	
		contribution to the field of	Awarded the Ramon Magsaysay award in 2005	
		cancer treatment		
Dr. Arvind Krishnamurthy	MBBS,	A popular cancer surgeon	Currently he is an Additional Professor of Surgical	Advisor
	MS (General Surgery),	who is actively involved in	Oncology at the Cancer Institute (WIA) Adyar, Chennai.	
	M.Ch (Surgical Oncology),	comprehensive cancer	His areas of special expertise are Thoracic and	
	DNB (Surgical Oncology),	care.	Head/Neck Surgical Oncology, which represents more	
	FAGE, FAIS, FICS	His Super Specialty	than 30% of the hospital work load.	
		Oncology training is from	• He is an active national crusader for tobacco advocacy.	
		the prestigious Tata	He is also a Faculty and National Examiner in the College	
		Memorial Centre, Mumbai,	of Oncology Sciences for Mch Surgical Oncology.	
		which is a recognized	In addition to having delivered more than 100	
		training centre for cancer	presentations, authored more than 35 publications in	
		education and research by	reputed national and international journals and	
		national and international	contributed to multiple textbooks.	
		organizations such as	• Dr. Arvind Krishnamurthy is also serving as a reviewer of	
		WHO, IAEA and UICC.	the International Journal of Head and Neck Surgery, the	
	Name Dr. Shantha Dr. Arvind Krishnamurthy	NameQualificationsDr. ShanthaMBBSMDDr. Arvind KrishnamurthyMBBS,MS (General Surgery), M.Ch (Surgical Oncology), DNB (Surgical Oncology), FAGE, FAIS, FICS	NameQualificationsSpecializationDr. ShanthaMBBS• A well renowned cancer specialist who has received numerous awards for her contribution to the field of cancer treatmentDr. Arvind KrishnamurthyMBBS, MS (General Surgery), M.Ch (Surgical Oncology), DNB (Surgical Oncology), FAGE, FAIS, FICS• A popular cancer surgeon who is actively involved in comprehensive cancer care.His Super Specialty Oncology training is from the prestigious Tata Memorial Centre, Mumbai, which is a recognized training centre for cancer education and research by national and international organizations such as WHO, IAEA and UICC.	NameQualificationsSpecializationExperience & AchievementsDr. ShanthaMBBS MD• A well renowned cancer specialist who has received numerous awards for her contribution to the field of cancer treatment• Currently the chairperson of the Adyar cancer institute • Awarded the Padma Shri award for her contribution in the field of cancer • Awarded the Ramon Magsaysay award in 2005Dr. Arvind KrishnamurthyMBBS, MS (General Surgery), M.Ch (Surgical Oncology), DNB (Surgical Oncology), FAGE, FAIS, FICS• A popular cancer surgeon who is actively involved in comprehensive cancer care.• Currently he is an Additional Professor of Surgical Oncology at the Cancer Institute (WIA) Adyar, Chennai.Pr. Arvind KrishnamurthyMBBS, MS (General Surgery), DNB (Surgical Oncology), FAGE, FAIS, FICS• A popular cancer surgeon who is actively involved in comprehensive cancer care.• Currently he is an Additional Professor of Surgical Oncology at the Cancer Institute (WIA) Adyar, Chennai.Pr. Arvind KrishnamurthyMBBS, M.Ch (Surgical Oncology), FAGE, FAIS, FICS• His Super Specialty Oncology training is from the prestigious Tata Memorial Centre, Mumbai, which is a recognized training centre for cancer education and research by national and international organizations such as WHO, IAEA and UICC.• His Anational and international journals and contributed to multiple textbooks.Dr. Arvind Krishnamurthy is also serving as a reviewer of the International Journal of Head and Neck Surgery, the• A popular cancer surgeon who is actively involved in comprehensive cancer care.• His areas of special expertise are Thoracic and Head Neck Surgery in the Colle

Table 4: Patrons and professionals supporting the project





SI. No.	Name	Qualifications	Specialization	Experience & Achievements	Proposed Role in the
					Project
3.	Dr. K.N.Krishnan	MBBS,MS- General Surgery	 Diagnostic and Operative Upper GI Endoscopy, Colonoscopy Procedures and Laser Endoscopy Basic and Advanced Laparoscopic Surgery Procedures Laser Surgery procedures An ability to handle 	 World Journal of Endocrine Surgery and the Indian Journal of Surgical Oncology. Awarded the Dr. KS Sanjivi Award in 2011. He is also a recipient of the Iyan Valluvar Award in 2010. Having 40years of experience as a surgeon, has Experience in performing thousands of surgeries in Plastic Surgery, General Surgery,Paediatric Surgery and Accident Surgery. More than 25,000 Diagnostic and Operative Endoscopy Procedures. 	Advisor
4.	Dr. KSV Nambi	M.Sc,Ph.D	emergency and elective problems including Trauma care	He has served as Ex Head, Environmental Assessment of	Advisor
				Bhabha Atomic Research Centre	
5.	Dr. Selvaluxmy Ganesharajah	MBBS DMRT MD (Radiotherapy)	 Brachytherapy in Gynaecologic malignancies Underwent training in "Brachytherapy in gynaecological malignancies" at Christie 	 Currently he is an Professor, Division of Radiation Oncology at the Cancer Institute (WIA) Adyar, Chennai. Life member of the Association of Radiation Oncologists of India Life member of the Indian Society of Oncology Life member of the Association of Medical Physicists of India Founder member of Indian Brachytherapy Society. 	Advisor





SI. No.	Name	Qualifications	Specialization	Experience & Achievements	Proposed Role in the
					Project
			Hospital and Radium Colt Institute, Manchester, United Kingdom from June to September, 1994.	 she is also a Faculty for:M.D. (Radiotherapy) Diploma in Medical Radiation Therapy Diploma course in Radiotherapy Technology D.M. (Medical Oncology) M.Ch. (Surgical Oncology) The teaching has been both lectures and clinics. She is also an examiner for M.D. (Radiotherapy) & D.M.R.T. in the Tamil Nadu Dr. M.G.R. Medical University, Chennai 	
6.	Dr Krishna Kumar Rathnam	MD (Gen Med) , DM (Med Onco)	 Gynecological cancers including breast cancer and Hematological malignancies including stem cell transplant 	 Best outgoing student and gold medallist in MD General Medicine year 2006 Kasturba Medical College , Mangalore , Karnataka Best outgoing student and Gold medallist in DM Medical Oncology year 2010 Cancer Institute , Adyar , Chennai University topper and medalist in DM Medical Oncology Tamilnadu Dr MGR Medical University Principal Investigator and Co Investigator in many ongoing clinical phase I – IV clinical trials at Meenakshi Mission Hospital and Research Centre. 	Medical Director Medical Oncologist
7.	Dr.H.Sivaramakrishnan	MBBS MD	• Cardiology	 Completed 35 years of service in Tirunelveli He is the founder director for Grandix Pharmaceuticals, Euglow Pharmaceuticals and also Regenix group of companies. He was the first one among the three southern districts viz: Tirunelveli - Tuticorin - Kanyakumari to bring Ultrasound & CT scan & MRI First cardiac surgery in Tirunelveli district was done 15 years back under his supervision He is the district Medical refrie for LIC 	Advisor
8.	Mr. T. S. KRISHNA MURTHY	Post-graduation in		He was the first Chairman of Investor Protection and Education Fund	Advisor





UDHAVUM ULLANGAL A Registered Public Charitable Trust

SI. No.	Name	Qualifications	Specialization	Experience & Achievements	Proposed Role in the
					Project
	Former Chief Election Commissioner of India	Economics , BL and M.Sc., (Fiscal Studies)		 He has also served as Joint Secretary (Tax Policy), Ministry of Finance, Joint Secretary (Foreign Tax Division), Ministry of Finance and Additional Secretary (Expenditure), Ministry of Finance. authored a book on democracy "The Miracle of Democracy: India's amazing journey" Secretary to the Government of India, Department of Company Affairs in January, 1997 to deal with issues under the Companies Act, 1956, Monopolies and Restrictive Trade Practices Act and other allied subjects 	
9.	Dr. Pushpa Raju,	MBBS DGO	 obstetrics and gynaecology Ultrasonography in obstetrics & gynaecology Laparoscopic Surgery 		Advisor
10.	Mr. M. BALASUBRAMANIAN	MBA in International Marketing & BS in Electronic Engineering	 US Insurance Services, Business Development, Operations, Training and managing financial advisor network 	 He was the Vice President - Marketing, at Linsco/Private Ledger (LPL Insurance, CA) and was earlier General Manager of Insurance Services at Associated Securities Corp. (Pacific Life). Has trained 5600+ financial advisors in advanced Estate & Financial planning concepts 	Advisor
11.	Mr.S.Gopalakrishnan			He was Vice President (Sales) for Nutrine Confectionery	Advisor
12.	Mr. C.Devadasa Sundaram	BE MIE		 45 years experience in civil engineering Chairman and Managing Director of Cee Dee Yes Group 	Advisor







5. Project Financials

5.1. Project cost and funding envisaged

The project is proposed to be undertaken in the following phases:

Phase I: This phase involves running of a day-care centre for patients in the region. It is proposed to establish this day-care facility in a 6,000 square feet leased space in the region. The day care unit will have separate facilities for male, female and children. The estimated project cost is **INR 2.75 crores** which is expected to be funded by donations and contributions from likeminded volunteers and supporters.

Phase II: This phase involves the establishment of a 100 bed hospital in about 5 acres of land. The hospital will have a built up area of 40,000 square feet. The estimated project cost is **INR 30.61 crores**.

SI. No	ltem/Block	Estimated Cost (In Rs.)
1	Out Patient Block	12,000,000
2	Radiology Block	16,800,000
3	Clinical Lab Block	6,400,000
4	ICU Block	4,800,000
5	Palliative Care Block	2,400,000
6	Emergency Care Block	4,000,000
7	General Ward (Male) Block	4,000,000
8	General Ward (Female) Block	4,000,000
9	Semi Private Block	5,600,000
10	Private Block	4,000,000
11	Admin Block	8,000,000
12	Patient Support Service Block	12,800,000
13	Doctors Block	6,400,000

The block wise break up of the building is given below:

Note: The above mentioned cost are indicative and includes all expenses except land cost and medical equipment







The break-up of total project cost is given below:

Table 5: Cost of Project details

All amounts in Rs.

Cost of Project	Day Care	Hospital	Total
a. Land Cost - Hospital 5 acres @ Rs.20 Lakhs per acre	-	10,000,000	10,000,000
b. Construction Cost - 40,000 sq ft x Rs.2000 per sqft	-	80,000,000	80,000,000
c. Machinery & Equipment	6,478,500	130,300,000	136,778,500
d. Furniture, Fixtures & Airconditioning	6,000,000	6,000,000	12,000,000
e. Vehicles	1,500,000	1,500,000	3,000,000
f. Lease Deposit	1,800,000	-	1,800,000
g. Contingencies - 5% of Construction Cost	-	4,000,000	4,000,000
h. Funded Operating Losses	11,730,718	72,367,845	84,098,563
i. Preliminary & Preoperative		2,000,000	2,000,000
Total Cost of Project	27,509,218	306,167,845	333,677,063







6. Implementation Plan

The proposed implementation plan of the project is given in **Table 6**:

Table 6: Implementation Plan

Particulars	Timeframe
Pre Project	
Screening of patients	Completed
Ground work and research	Completed
Phase I: Land Acquisition	
Land Acquisition	Based on discussion
Soil Testing & land classification	15 days
Architectural Drawing	2 months
Approvals & Permits	3 - 6 months
Phase II : Construction	
OP Block & Admin Block	14 months
Administration Block	14 months
Pharmacy Block	14 months
Radiation Block	14 months
Laboratory Block	14 months
IP Block	
Gen. Ward Male Block	
Gen. Ward Female Block	
Operation Theatres Block	
Private Rooms Block	14 months
	14 11011(115
Furniture and Air-conditioning	2 months
Phase III:	
Machinery	6 months
Vehicles	3 months
Software	6 months



