

# MENTAL RETARDATION HOSPITAL WITH CELEBRAL PALSY

#### Introduction

Mental institutions are a modern development. Although born of society's sense of need and scientific advances in psychiatry, their purpose and function have remained controversial since inception.

In a hospital that is an integral part of a social and medical organization whose function is to provide medical care to the population for both curative and preventive purposes, as well as providing outpatient services. The healthcare industry is one of the most complex areas of human activity. Hospitals are mostly organizations that provide services. Health care is an important element of national expenditure, so it is important to know the nature and quality of services provided, which should be investigated. In a hospital, in a large organization, this provides significant benefits, both for the patient and for society as a whole. Some health problems that require intensive drug therapy and personal hygiene products are usually not available in the home or in the doctor's clinic, and this is only possible in a hospital setting where there are a large number of professional and technically trained people to use their knowledge and skills, with the help of world-class, modern and advanced equipment.

A hospital can be located in one building or several buildings on campus. An academic hospital combines patient care with the training of medical students and nurses, and often includes a medical school, nursing school, or university. Hospitals vary in the services they offer and, as a result, for the detachments they have.

#### **Market Potential**

The healthcare development scenario is rapidly changing all over the world. Today, the Indian healthcare system is focused on business, and you can see the effect of different types of service providers to be part of this huge, multi-core company with a growth rate of 13% per year. Globalization and privatization have also changed the behavior of the healthcare system. The healthcare industry is one of the most exciting and fast-growing industries in India. The turnover of the healthcare sector is 5.2 percent. its GDP, making it the third-highest growth rate in this segment in India.

The healthcare industry has grown into one of India's largest sectors - both in terms of revenue and employment. The Indian health market is expanding dramatically. The Indian healthcare sector accounted for \$ 110 billion in 2016 and is expected to reach \$ 280 billion by 2020 as a result of the growing demand for specialized and high-quality healthcare facilities.

## **Cost Of Project**

Particulars Particulars	Amount (Rs.in Lakhs)
Land own	0.00
Land Development (lumpsum)	200.00
Building with Civil Works	2445.00
D G Set 50 KV	4.50
Hospital Services	40.50
Hospital Furniture and fixed assets	65.40
Medical Equipment and Instruments	211.00
Escalation & Contingencies	148.30
Preliminary & Preoperative Expenses (Annexure)	181.70
Sub-total (A)	3296.40
Working Capital Margin @40% of Total Working Capital	5.00
Requirement	5.00
Total Project Cost	3301.40
Total Working Capital Required (B)	10.00
MEANS OF FINANCE	
Total Funds Required(A+B)	3306.40
Loan Component-	
TERM LOAN	1648.00
WORKING CAPITAL	5.00
Total LOAN AMOUNT (TL+WC)	1653.00
Equity (50% OF THE PROJECT COST)	1653.00
Total	3306.00

## **Detailed Cost Element**

SL	Particulars	Quantity	Amount (Rs. in Lakhs)
Α	Out Patient Department (OPD)		
1	Blood Pressure instrument	10	0.08
2	Stethoscope	10	0.04
3	X Ray View box	5	0.08
4	ENT work Station	1	2.50
В	Neurology Department		
1	EEG Machine + Sleep Analysis RMS	1	3.50
2	EMG machine / BERA - RMS	1	3.50
С	Radiology Department		
1	X-Ray Machine mobile siemens	1	3.25
2	Dark Room Accessories	1	0.90
D	Pathological Department		
1	Biochemistry Transcia	2	3.40
2	Electrolyte	1	1.80
3	Microscope	1	0.30
4	Miscellaneous Laboratory Equipment	2	4.00
Е	Diagnostic Department		
1	Pulse oxy meter Hand held, BPL-CLEO	2	1.10
2	BPL 2509	1	1.80
3	BPL	1	0.06
4	Syringe pump, BPL- Baxter	2	1.10
5	Patient Monitor, Multipara, BPL ultima	4	7.60
6	Crash Cart	2	0.80
7	Suction Electric, Supreme	1	0.10
8	Ventilators	2	11.00
9	Ultrasound Machine	2	36.00
10	Hematology Analyzer	2	12.00
11	Biochemistry Analyzer	2	16.00
12	Sterilizer	5	25.00
13	Incubator	2	3.00
14	Auto Analyzer	2	14.00
15	Oxygen Cylinders	10	0.90
F	Minor OT		
1	Operation table	1	0.70
2	Operation Light	1	0.25
3	Anesthesia Machine	1	1.50
4	Surgical instruments	1	1.50
5	Suction Electric, Supreme	1	0.10
Ğ	Physiotherapy Department	-	
1	Short wave Diathermy unit	1	5.00

2	Ultrasound Therapy unit	1	1.50
3	Interferential Therapy unit	1	0.55
4	TENS, IMI	1	0.10
5	Traction system, IMI	1	0.90
6	Exercise Unit	1	2.00
H	Sterilization Department		2.00
1	Autoclave, Horizontal	1	3.00
2	Autoclave , Vertical	1	0.90
ī	ICU		0.00
1	Crash Cart	1	0.40
2	Defibrillator	1	1.60
3	Syringe Pump	4	2.20
4	Monitors	5	9.50
5	Ventilators	1	1.50
6	Nebulizer	1	0.04
7	ECG Machine PL 8408	1	0.95
8	Suction Electric , Supreme	1 1	0.95
	•	ı	0.10
J	Adaptive Equipment		
1	Strollers	5	0.27
2	Walkers	5	0.08
3	Braces	5	0.35
4	Orthotic Boots	5	0.50
5	Ankle-Foot Orthoses	5	0.07
6	Brachiation Kits	5	0.20
7	Toilet Chairs	5	0.50
8	Bath Chairs	5	0.40
9	hearing and vision aids	4	0.48
K	Other Equipment		
1	Fully Automatic Auto Analyzer	3	3.60
2	Semi Auto Analyzer	1	0.80
3	Spectrophotometer	2	2.00
4	Auto photometer	1	0.80
5	Batch top automatic analyzer for biochemistry	1	2.80
6	PH meter	1	0.19
7	Electrical balance (0.1 mg- 200 gm)	1	0.72
8	Na+, K+, Li+, Ca++, Cl- Analyzer ion selective	1	1.50
9	Binocular Microscope	1	0.68
10	Centrifuge Machine	1	1.80
11	Vertex Mixer	5	4.33
	Total	171	211.05

# **Contingencies and Escalations**

It has been assumed at approximately 5% at cost.

## **Preliminary Expenses**

Particulars	Amount (Rs.in Lakhs)
Incorporation Expenses	3.00
Project Report Preparation and Consultation	0.50
Feasibility and Engineer's/Architect's Report and Plans	12.23
Legal Charges - Drafting for agreements, contracts, stamp paper, notary	0.50
Other recurring expenses of revenue nature up to start of commercial	25.44
Interest for Pre-operative expenses	140.00
Total	181.67

# Salary

Designation	Manpower	Amount (Rs. in Lakhs)
Nursing Superintendent	2	8.00
Matron	6	2.00
Nurses	30	90.00
Assistant	40	72.00
Ward boys	10	12.00
Biologist / Micro Biologist	2	12.00
Bio Medical Engineer	2	11.00
Lab Technician	2	7.00
Administrative Manager	1	7.00
System Manager	1	5.00
HR Manager	1	4.00
HR Manager	1	4.00
Accounts Staff	4	12.00
Cashier	2	5.00
Purchase Manager	1	5.00
Liaison Officer	1	3.00
Front Officer	2	7.00
Store Keeper	2	4.00
Electrician/ Plumber	4	7.00
Drivers	4	6.00
Receptionist	2	4.00
Pharmacist	2	10.00
Pharmacy Asst.	6	14.00
Medicine Consultant	2	14.40
Cardiologist	1	7.00
Paediatrician (Child Specialist)	1	4.00
Resident Medical Specialist	4	22.00
Pathologist (MD)	1	6.00
Psychiatrist	2	8.00
Psychiatric social workers	5	12.00
Gardener	2	2.00
Game trainer/ gym trainer	4	5.00
Occupational activities trainer	2	3.00
Cook	6	7.00
Cook helper	12	7.00
Sweeper	8	8.00
Security	20	24.00
Skill trainer	6	11.00

# **Profitability Statement**

Amount (Rs. in										
Particulars	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5	Year-6	Year -7			
A. INCOME										
Maximum Capacity	200	200	200	200	200	200	200			
Capacity Utilized	70%	75%	80%	85%	90%	90%	90%			
Beds utilized	140	150	160	170	180	180	180			
Annual Receipts	1,153.93	1,218.56	1,300.99	1,401.20	1,465.83	1,474.73	1,494.73			
Total Income/ annum	1,153.93	1,218.56	1,300.99	1,401.20	1,465.83	1,474.73	1,494.73			
B. OPERATING EXPENSES										
Medicine spares	230.79	243.71	260.20	280.24	293.17	294.95	298.95			
Medicine cost	47.91	51.33	54.75	58.17	61.59	61.59	61.59			
Salary	206.04	216.34	227.16	238.52	250.44	262.97	276.11			
Repair &	28.10	29.50	30.98	32.52	34.15	35.86	37.65			
Power & utilities	69.57	73.05	76.70	80.54	84.56	88.79	93.23			
Depreciation and amortization	85.24	85.24	75.20	65.16	64.97	28.64	27.86			
Total Operating Expenses	667.64	699.17	724.98	755.15	788.89	772.80	795.39			
Operating Profit (A-B)	486.29	519.39	576.00	646.06	676.94	701.93	699.33			
C. FINANCIAL EXPENSES										
Interest on loan	144.13	125.02	105.91	85.20	67.68	48.57	29.46			
D. Other Expenses										
Administrative and	24.00	25.20	26.46	27.78	29.17	30.63	32.16			
Total Expenses	168.13	150.22	132.37	112.99	96.86	79.20	61.62			
Profit before Tax	318.16	369.17	443.64	533.07	580.09	622.73	637.71			
Provision for Tax	47.72	55.38	66.55	79.96	87.01	93.41	95.66			
Profit After Tax	270.44	313.80	377.09	453.11	493.07	529.32	542.05			
Dividend	0.00	0.00	0.00	0.00	0.00	0.00	0.00			
Retained Profits	270.44	313.80	377.09	453.11	493.07	529.32	542.05			

## **Breakeven Point**

E	Break Even Point (BEP)  Amount (Rs. in Lakhs)										
S	Particulars	Year - 1	Year - 2	Year - 3	Year - 4	Year - 5	Year - 6	Year - 7			
Α	Net Sales	1,153.93	1,218.56	1,300.99	1,401.20	1,465.83	1,474.73	1,494.73			
В	Variable Cost										
	Raw Material	230.79	243.71	260.20	280.24	293.17	294.95	298.95			
	Power and Utility	69.57	73.05	76.70	80.54	84.56	88.79	93.23			
	Other Miscellaneou s Expenses	24.00	25.20	26.46	27.78	29.17	30.63	32.16			
	Total Variable Cost	324.36	341.96	363.36	388.56	406.90	414.37	424.34			
С	Contribution (A-B)	829.57	876.60	937.63	1,012.64	1,058.93	1,060.36	1,070.39			
D	Fixed Cost										
	Salary	206.04	216.34	227.16	238.52	250.44	262.97	276.11			
	Repair & Maintenance	28.10	29.50	30.98	32.52	34.15	35.86	37.65			
	Interest on term Loan	144.13	125.02	105.91	85.20	67.68	48.57	29.46			
	Depreciation	85.24	85.24	75.20	65.16	64.97	28.64	27.86			
	Total Fixed Cost	463.50	456.10	439.24	421.40	417.25	376.04	371.08			
E	Breakeven Point	56%	52%	47%	42%	39%	35%	35%			
F	Cash BEP	46%	42%	39%	35%	33%	33%	32%			

# **Debt-Service Coverage Ratio**

						, and the second se	Amount (Rs	. in Lakhs)
SL	Particulars	Year- 1	Year- 2	Year- 3	Year- 4	Year- 5	Year- 6	Year- 7
i	Profit	270.44	313.80	377.09	453.11	493.07	529.32	542.05
ii	Depreciation	85.24	85.24	75.20	65.16	64.97	28.64	27.86
iii	Interest	144.13	125.02	105.91	85.20	67.68	48.57	29.46
Α	Total (i + ii+ iii)	499.81	524.05	558.20	603.47	625.73	606.53	599.37
i	Interest	144.13	125.02	105.91	85.20	67.68	48.57	29.46
ii	Principal repayment	224.83	224.83	224.83	224.83	224.83	224.83	224.83
В	Total (i + ii)	368.96	349.85	330.74	310.04	292.52	273.41	254.30
	DSCR (A / B)	1.35	1.50	1.69	1.95	2.14	2.22	2.36

## **Interest on Term Loan and Principal Repayment**

Refer Annexure I for Loan Repayment Schedule.

We have assumed the repayment tenure of term loan for a period of 8 years, Rate of interest being 8.5% p.a. with the moratorium period of 21 months.

#### **Address of Vendors**

Name of Vendor	Address and Contact Number
Micro lab Instruments	3 Akshay Apartments, Near Sanskrut, B.H. Popular House, Ashram Road, Ahmedabad-380009 Ph. 7926575919
Akarui Solution LLP	403 Blue Rose Industrial Estate, Borivali (East), Mumbai, Maharashtra Ph. 07971481657
S.N. Medical System	Door no. 14-11-2, Ramajogi Peta, Maharani Peta Cell Tower Building Visakhapatanam - 530002, Andhra Pradesh Ph. 08048707084

#### ANNEXURE- I

Year	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Annually
Principal													
Opening	1,648.00	1,630.83		1,596.50	1,579.33	1,562.17	1,545.00	1,527.83	1,510.67	1,493.50	1,476.33	1,459.17	-
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing	1,630.83	1,613.67	1,596.50	1,579.33	1,562.17	1,545.00	1,527.83	1,510.67	1,493.50	1,476.33	1,459.17	1,442.00	-
Interest	11.67	11.55	11.43	11.31	11.19	11.07	10.94	10.82	10.70	10.58	10.46	10.34	132.05
 <i>Principal</i>													
Opening	1,442.00	1,424.83	1,407.67	1,390.50	1,373.33	1,356.17	1,339.00	1,321.83	1,304.67	1,287.50	1,270.33	1,253.17	_
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing	1,424.83	1,407.67	1,390.50	1,373.33	1,356.17	1,339.00	1,321.83	1,304.67	1,287.50	1,270.33	1,253.17	1,236.00	-
Interest	10.21	10.09		9.85	9.73	9.61	9.48	9.36	9.24	9.12	9.00	8.88	114.54
III Principal													
Opening	1,236.00	1,218.83	1,201.67	1,184.50	1,167.33	1,150.17	1,133.00	1,115.83	1,098.67	1,081.50	1,064.33	1,047.17	-
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing	1,218.83	1,201.67	1,184.50	1,167.33	1,150.17	1,133.00	1,115.83	1,098.67	1,081.50	1,064.33	1,047.17	1,030.00	-
Interest	8.76	8.63	8.51	8.39	8.27	8.15	8.03	7.90	7.78	7.66	7.54	7.42	97.03
l∨ <i>Principal</i>													
Opening	1,030.00	1,012.83	995.67	978.50	961.33	944.17	927.00	909.83	892.67	875.50	858.33	841.17	_
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing	1,012.83	995.67	978.50	961.33	944.17	927.00	909.83	892.67	875.50	858.33	841.17	824.00	200.00
Interest	7.17	7.05		6.81	6.69	6.57	6.44	6.32	6.20	6.08	5.96	5.84	78.07
∨ <i>Principal</i>													
Opening	824.00	806.83	789.67	772.50	755.33	738.17	721.00	703.83	686.67	669.50	652.33	635.17	-
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing	806.83	789.67	772.50	755.33	738.17	721.00	703.83	686.67	669.50	652.33	635.17	618.00	200.00
Interest	5.84	5.72		5.47	5.35	5.23	5.11	4.99	4.86	4.74	4.62	4.50	62.01
VI													
Principal													
Opening	618.00	600.83		566.50	549.33	532.17	515.00	497.83	480.67	463.50	446.33	429.17	
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing Interest	600.83 4.38	583.67 4.26	566.50 4.13	549.33 4.01	532.17 3.89	515.00 3.77	497.83 3.65	480.67 3.53	463.50 3.40	446.33 3.28	429.17 3.16	412.00 3.04	44.50
VII													
Principal													
Opening	412.00	394.83	377.67	360.50	343.33	326.17	309.00	291.83	274.67	257.50	240.33	223.17	-
Repaid	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	17.17	206.00
Closing	394.83	377.67	360.50	343.33	326.17	309.00	291.83	274.67	257.50	240.33	223.17	206.00	-
Interest	2.92	2.80	2.68	2.55	2.43	2.31	2.19	2.07	1.95	1.82	1.70	1.58	26.99
VIII Bringing/													
Principal Opening	206.00	188.83	171.67	154.50	137.33	120.17	103.00	85.83	68.67	51.50	34.33	17.17	_
Repaid	17.17	188.83	171.67	154.50	137.33	120.17	103.00	85.83 17.17	17.17	17.17	34.33 17.17	17.17	206.00
Closing	188.83	171.67	154.50	137.33	120.17	103.00	85.83	68.67	51.50	34.33	17.17	0.00	206.00
Interest	1.46	1.34		1.09	0.97	0.85		0.61	0.49	0.36	0.24	0.00	9.48