



Pre-feasibility Study

SKILLED NURSING CARE FACILITIES

August 2021

“The figures and financial projections are approximate due to fluctuations in exchange rates, energy costs, and fuel prices etc. Users are advised to focus on understanding essential elements such as production processes and capacities, space, machinery, human resources, and raw material etc. requirements. Project investment, operating costs, and revenues can change daily. For accurate financial calculations, utilize financial calculators on SMEDA’s website and consult financial experts to stay current with market conditions.”

Small and Medium Enterprises Development Authority
Ministry of Industries and Production
Government of Pakistan

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1. DISCLAIMER

This information memorandum is to introduce the subject matter and provide a general idea and information on the said matter. Although, the material included in this document is based on data / information gathered from various reliable sources; however, it is based upon certain assumptions, which may differ from case to case. The information has been provided on, as is where is basis without any warranties or assertions as to the correctness or soundness thereof. Although, due care and diligence has been taken to compile this document, the contained information may vary due to any change in any of the concerned factors, and the actual results may differ substantially from the presented information. SMEDA, its employees or agents do not assume any liability for any financial or other loss resulting from this memorandum in consequence of undertaking this activity. The contained information does not preclude any further professional advice to be obtained by the user. The prospective user of this memorandum is encouraged to carry out additional diligence and gather any information which is necessary for making an informed decision, including taking professional advice from a qualified consultant / technical expert before taking any decision to act upon the information.

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2. EXECUTIVE SUMMARY

A nursing care facility provides services for care of elderly or disabled people at their homes. Nursing care may also be referred to as skilled nursing facility (SNF), long-term care facilities or assisted living. Often, these terms have slightly different meanings to indicate whether the institutions are public or private and whether they provide mostly assisted, or nursing and emergency medical care. Nursing care services are used by people who do not need to be in a hospital, but cannot be taken care of at home by the people available in there. In a nursing care facility center, the nurses have the responsibilities of caring for the patient's medical needs. Most nursing homes have nursing aides and skilled nurses offering services 24 hours a day.

This "Pre-feasibility Document" provides details for setting up Skilled Nursing Care Facilities (hereinafter referred to as Nursing Care Facilities (NCF). Demand for nursing care is expected to increase in the country due to increasing number of elderly and disabled people who need home health services; more than any other segment of the population. A nursing care facility may be established in larger cities such as Karachi, Lahore, Islamabad, Peshawar, Rawalpindi, Quetta, Faisalabad, Sialkot, Hyderabad, Gujranwala, Multan, etc.

The proposed project has a total investment of PKR 3.89 million. This includes capital investment of PKR 3.32 million and working capital of PKR 0.58 million. This project is financed through 100% equity in which case the Net Present Value (NPV) is PKR 37.11 million with an Internal Rate of Return (IRR) of 87% and a Payback period of 1.81 years. Further, this project is expected to generate Gross Annual Revenues of PKR 20.84 million during first year, Gross Profit (GP) ratio ranging from 24% to 55% and Net Profit (NP) ratio ranging from 4% to 29% during the projection period of 10 years. The proposed project will achieve its estimated breakeven point at 43% (10,000 nursing days) with annual revenue of PKR 15.08 million.

The proposed project may also be established using leveraged financing. At 50% financing at a cost of KIBOR+3%, the proposed project provides Net Present Value (NPV) of PKR 41.64 million, Internal Rate of Return (IRR) of 86% and Payback period of 1.85 years. Further, this project is expected to generate Net Profit (NP) ratio ranging from 4% to 29% during the projection period of ten years. The proposed project will achieve its estimated breakeven point at capacity of 44% (10,113 nursing staff days) with annual revenue of PKR 15.25 million.

The proposed project will provide permanent employment opportunities to around 13 people. Nursing staff will be hired as per the demand. The legal business status of this project is proposed as Sole Proprietorship. The project may also be established as a partnership between a potential investor and medical professionals.

3. INTRODUCTION TO SMEDA

The Small and Medium Enterprises Development Authority (SMEDA) was established in October 1998 with the objective to provide fresh impetus to the economy through development of Small and Medium Enterprises (SMEs).

With a mission "to assist in employment generation and value addition to the national income, through development of the SME sector, by helping increase the number, scale and competitiveness of SMEs", SMEDA has carried out 'sectorial research' to identify policy, access to finance, business development services, strategic initiatives and institutional collaboration and networking initiatives.

Preparation and dissemination of prefeasibility studies in key areas of investment has been a successful hallmark of SME facilitation by SMEDA.

Concurrent to the prefeasibility studies, a broad spectrum of business development services is also offered to the SMEs by SMEDA. These services include identification of experts and consultants and delivery of need-based capacity building programs of different types in addition to business guidance through help desk services.

National Business Development Program for SMEs (NBDP) is a project of SMEDA, funded through Public Sector Development Program of Government of Pakistan.

The NBDP envisages provision of handholding support / business development services to SMEs to promote business startup, improvement of efficiencies in existing SME value chains to make them globally competitive and provide conducive business environment through evidence-based policy-assistance to the Government of Pakistan. The Project is objectively designed to support SMEDA's capacity of providing an effective handholding to SMEs. The proposed program aimed at facilitating around 314,000 SME beneficiaries over a period of five years.

4. PURPOSE OF THE DOCUMENT

The objective of the pre-feasibility study is primarily to facilitate potential entrepreneurs in project identification for investment. The project pre-feasibility may form the basis of an important investment decision and in order to serve this objective, the document/study covers various aspects of project concept development, start-up, and production, marketing, finance and business management.

The purpose of this document is to provide information to the potential investors about "Setting-up Skilled Nursing Care Facilities" business. The document provides a general understanding of the business to facilitate potential investors in crucial and effective investment decisions.

The need to come up with pre-feasibility reports for undocumented or minimally documented sectors attain greater imminence as the research that precedes such

reports reveal certain thumb rules; best practices developed by existing enterprises by trial and error, and certain industrial norms that become a guiding source regarding various aspects of business set up and its successful management.

Apart from carefully studying the whole document one must consider critical aspects provided later on, which form basis of any investment decision.

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5. BRIEF DESCRIPTION OF PROJECT & SERVICES

Due to changing and demanding occupational and financial requirements, most families don't have time to look after their old or disabled family members because of their busy work schedule. Therefore, they require nursing support to look after their loved ones for their medication and help the patients follow the health care plan which can speed up their recovery process.

This document provides details for setting-up a Nursing Care Facilities center to provide nursing care to the elderly or disabled people. These services are essential to maintain the health of elderly and disabled people. Nursing facilities provides personalized care in familiar surroundings. People prefer such services since the elderly adults generally recover faster, with fewer complications, when they are at home than when in a hospital. The patients are able to get professional medical care and advice by the skilled staff provided by such centers. People also prefer such services at home to keep their loved ones closer to them and also involve in their look after by themselves. With NCF services, the patients can also get help in managing their medications. The skilled nursing staff can also perform regular sugar test and blood pressure checks as per the instructions of the patient's doctors. This prevents any side effects of the medicines and helps maintain the patients' health and avoid any need to go to the hospital to get specialized medical care.

The proposed nursing care facilities center will be run by owner and administrator working in two shifts of eight hours. Mostly, the proposed business is run by entrepreneurs and there is no specific or any legal requirement that these businesses should necessarily only be run by doctors or medical professionals. The required medical apparatus includes hospital beds, blood pressure apparatus, stethoscope, glucometers¹, suction machine², thermometer, examination light, pulse oximeter (portable)³, first aid kit, and oxygen kits. There will be twelve employees in the proposed center including an owner/administrator, 2 skilled nurses, 4 assistant nurses, 3 care takers, 1 Admin and Accounts officer, 1 office boy and 1 security guard. These staff members will be based in the nursing care center and will not be

¹Glucometer is an instrument for measuring the concentration of glucose in the blood.

²Suction machine is an appliance used to remove substances such as blood, saliva, mucus, and vomit from a person's airway.

³A pulse oximeter is a small, lightweight device used to monitor the amount of oxygen carried in the body.

deployed or sent to customers' locations for home duty. In addition to these, the centers will engage 25-30 nurses who will be available on call to provide nursing services at homes. These nurses include full time nurses (50% males and 50% females), assistant nurses (50% males and 50% females) and care taker (70% males and 30% females). These will be paid on daily basis as per their appointments at different locations to provide nursing services.

Types of Nursing Personnel

- **Full time Nurse:** These nurses will work in residential homes of the patients, who are severely ill. For these patients nursing staff are scheduled on a shift basis to provide 24-hour care.
- **Assistant Nurse:** These nurses (diploma holder) will work in residential homes of the patients, who are ill and need assistance for medical needs.
- **Care taker:** These nurses (non-qualified) are hired by families for a specific duration during day time, when the family members are not available for taking care of the patients.

The proposed business will hire nurses that are fully qualified, properly trained and experienced for providing quality nursing services to clients.

5.1. Benefits of Nursing Care

The availability of regular skilled nursing care serves the following benefits:

- Medication management
- Overall management and evaluation of patient care plan
- Professional and personalized care of patients and the elderly people
- Continuous monitoring of the patient's condition and initiation of timely steps to avoid any possible danger to his health
- Avoidance of any medication errors
- Ongoing assessment of rehabilitation needs or need for hospitalization

5.2. Process Flow of Provision of Skilled Nursing Facilities

Appointment with NCF Center

In the first step, an appointment is sought by the client through call or visit to the nursing care facility. The administration of the NCF inquiries from the client about the nature of the required services. After assessing the customer requirements, the administration informs the client about the fee and detail of the services that will be provided by the NCF.

Service Agreement with the Customer

After reaching an agreement on the fee, an agreement is made between the client/patient and the nursing care facility. This agreement contains details about the

duration of service, nature of services, details about number of nurses required, payment terms (in advance), patient condition and the circumstances in the NCF will not be responsible (disclaimer).

Appointment of Nurse

The NCF appoints a dedicated nurse to the client. He/she is briefed about the specific condition and requirements of the patient. A schedule is provided to the client and the nursing staff which has the timings and details of the services required from the nursing staff.

Client's Feedback

The administration of the NCF obtains regular feedback from the clients about their experience with the services provided by the nursing staff. This helps the NCF to address the clients' grievances and complaints. The center's administration provides instructions to the nursing staff to resolve the complaints.

5.3. Installed and Service Capacities

The proposed center will have maximum capacity of 23,040 working days in a year. It is assumed to work 13,824 working days in the first year of operations. The operational capacity utilization is assumed to increase at the rate of 5% per annum to reach a maximum of 90% in year 7. Table 1 shows details of maximum annual capacity and operational capacity utilized during first year of operations.

Table 1: Service Capacity

Staff	Qualification	Number of Female Staff (A)	Number of Male Staff (B)	Total Staff ((A+B) =C)	Annual Working Days (C*360)
Nurses	5 year Education of Nursing	6	6	12	4,320
Assistant Nurse	Diploma Holder	14	15	29	10,440
Care Taker	Non Qualified Person	7	16	23	8,280
Total Nursing Staff		27	37	64	23,040

6. CRITICAL FACTORS

Before making the decision to invest in NCF business, one should carefully analyze the associated risk factors. The important considerations in this regard include:

- Engagement of professionally skilled nurses.
- Maintenance of high standards of patients' care.
- Compliance with the standards of hygiene.
- Courteous dealing with the patients for customer satisfaction.
- Regular and accurate maintenance of patients' records and;
- Regular feedback and follow ups of the patients.

7. GEOGRAPHICAL POTENTIAL FOR INVESTMENT

The proposed nursing care facility may be established in major cities such as Karachi, Lahore, Islamabad, Peshawar, Rawalpindi, Quetta, Faisalabad, Sialkot, Hyderabad, Gujranwala, Multan, etc. In addition to large cities, the project may also be established in smaller cities all over the country where such healthcare facilities, in spite of being in demand, are not very easily available. These cities are also preferred due to availability of skilled nursing staff in these cities which is the most important factor for establishing and operating this business.

8. POTENTIAL TARGET MARKETS

The potential target market includes people who are severely ill, elderly and disabled people. Nursing care is required for the people who are not able to perform tasks or required assistance of someone for their medication and personal care (bathing, clothes changing and general care).

The proposed services will be mostly acquired by affluent segments of the population due to people's busy schedules and changing societal priorities and trends. Due to increasing trend of settling in other countries, many people require these services to look after their parents in their old age. They require nursing support to properly administer their medication other related needs and help them follow the healthcare plan to maintain a comfortable and quality lifestyle for them.

According to Help Age⁴ statistics, as of 2019, almost 15 million people living in Pakistan are aged over 60 which constitute 7% of the country's total population. The proportion of people over 60 is expected to more than double and reaches 40 million in the year 2050. An increasing share of older people in the total population increases the demand for nursing care services.

⁴<https://ageingasia.org/ageingpopulationpakistan/#:~:text=As%20of%202019%2C%20almost%2015,the%20demand%20for%20health%20services.>

The other important segment of the demand is disabled people who include blind, deaf and suffering from any physical or mental disability.

Table 2 show the statistics related to disabled person in Pakistan.

Table 2 Statistics of Disabled Person⁵

Province	Total Disabled
Punjab	147,539
Khyber Pakhtunkhwa	116,491
Sindh	69,837
Azad Jammu and Kashmir	13,329
Balochistan	10,495
Gilgit Baltistan	7,886
Islamabad	6,706
Grand Total	371,883

According to WHO⁶ the national health infrastructure comprises of 1,201 hospitals, 5,518 Basic Health Units, 683 Rural Health Centers and 5,802 Dispensaries. The rising population pressure on state health institutions has allowed the private sector to bridge the gap of rising demand and limited public health facilities. The numbers of private hospitals, clinics and nursing care facilities have increased considerably which is contributing to increase healthcare coverage in the country.

There is no verifiable data available regarding the total number of nursing care facilities in Pakistan. However, according to primary market research, such facilities are working all over Pakistan; especially in larger cities.

9. PROJECT COST SUMMARY

A detailed financial model has been developed to analyze the commercial viability of “Skilled Nursing Care Facilities”. Various costs and revenue related assumptions along with results of the analysis are outlined in this section.

The projected Income Statement, Cash Flow Statement and Balance Sheet are attached as annexure of this document.

All the figures in this financial model have been calculated after carefully taking into account the relevant assumptions and target market.

9.1. Initial Project Cost

Table 3 provides fixed and working capital requirements for establishment and operations of the Skilled Nursing Care Facilities.

⁵https://www.pbs.gov.pk/sites/default/files//disablity_data_28252021.pdf

⁶<http://www.emro.who.int/pak/programmes/service-delivery.html>

Table 3 Project Cost

Description of Costs	Amount (PKR)	Reference
Capital Cost		
Land		9.1.1
Building Renovation Costs	120,200	9.1.2
Medical Apparatus	593,500	9.1.3
Furniture & Fixtures	405,000	9.1.4
Office Equipment	567,500	9.1.5
Office Vehicles	1,277,650	9.1.6
Pre-operating Costs	137,678	9.1.7
Advance Rent / Security	210,000	9.1.8
License Cost	5,000	9.1.9
Total Capital Cost	3,316,528	
Working Capital	577,419	9.1.10
Total Project Cost	3,893,947	

9.1.1. Land

The nursing care facility will be established in a rented building to avoid the high cost of land. Suitable location for setting up a healthcare business like this can be easily found on rent. Therefore, no land cost has been added to the project cost. Total space requirement for the proposed center has been estimated as 675 sq. feet. The breakup of the space requirement is provided in Table 4.

Table 4 Breakup of Space Requirement

Area Description	Area (sq. ft.)	% Break-Up
Consultation Room	120	18%
Training Room	140	21%
Admin and finance	100	15%
Reception & Waiting Area	140	21%
Kitchen	75	11%
Washrooms	100	15%
Total Area	675	100%

9.1.2. Building

There will be no cost of building construction since the center will be started in rented premises. However, there will be a renovation cost required to make the building usable for the business. The proposed project requires electricity load of 5-6 KW for which an electricity connection under the General Supply Tariff-Commercial single phase will be required. Building rent of PKR 70,000 per month has been included in the operating cost. Building renovation cost is shown in Table 5.

Table 5 Building Renovation Cost

Cost Item	Unit of Measurement	Total Liter / Area / Number	Unit Cost/ sq. ft. (PKR)	Total Cost (PKR)
Paint Cost	Litre	29	500	14,400
Labour Cost	Feet	2,880	10	28,800
Wall Racks	Units	3	15,000	45,000
Curtains	Units	4	3,000	12,000
Blinds	Units	4	5,000	20,000
Total				120,200

9.1.3. Medical Apparatus

Table 6 provides details of the medical apparatus requirement of the project.

Table 6 Medical Apparatus Requirement

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Bed	2	45,000	90,000
Blood Pressure Apparatus	5	20,000	100,000
Stethoscope	6	15,000	90,000
Glucometers	5	5,000	25,000
Suction machine	5	10,000	50,000
Thermometer	4	1,000	4,000
Examination light	4	3,000	12,000
Pulse oximeter (Portable)	5	2,500	12,500
First aid kits	6	15,000	90,000
Oxygen kits	5	24,000	120,000
Total	47		593,500

9.1.4. Furniture & Fixtures Requirement

Table 7 provides details of the furniture and fixture requirement of the project.

Table 7 Furniture and Fixtures Requirement

Cost Item	No.	Unit Cost (PKR)	Total Cost (PKR)
Office Tables	4	25,000	100,000
Executive Chairs	1	20,000	20,000
Office Chairs	12	10,000	120,000
Sofa Sets	3	35,000	105,000
Wall racks	4	15,000	60,000
Total	24		405,000

9.1.5. Office Equipment Requirement

Details of office equipment required for the project is provided in Table 8.

Table 8 Office Equipment Requirement

Cost Item	Units	Unit Cost (PKR)	Total Cost (PKR)
1.5 ton Inverter AC	2	90,000	180,000
Laptop Computer	3	80,000	240,000
Printer	1	40,000	40,000
LED TV 32"	1	40,000	40,000
Water Dispenser	1	20,000	20,000
Ceiling Fan	5	4,500	22,500
Wi-Fi Router and Connection	1	5,000	5,000
Security Cameras-2MP	4	2,000	8,000
Digital Video Recorder (DVR)	1	12,000	12,000
Total Cost			567,500

9.1.6. Office Vehicle Requirement

Details of office vehicle required for the project is provided in Table 9.

Table 9 Office Vehicle Requirement

Cost Item	Unit(s)	Unit Cost (PKR)	Registration fee	Total Cost (PKR)
Carry Van	1	1,075,000	10,750	1,085,750
Motorcycle	2*	95,000	1,900	191,900
Total Cost				1,277,650

*Motorcycles will be used to give pick and drop to staff.

9.1.7. Pre-Operating Cost

Details of pre-operating cost for the project are provided in Table 10.

Table 10 Pre-Operating Cost

Cost Item	Number / Months	Hiring before Year 0	Unit Cost	Total Cost (PKR)
Nurse-Male	2	1	50,000	50,000
Nurse-Female	1	1	50,000	50,000
Office Boy	1	1	20,000	20,000
Utilities Expense				17,678
Total (PKR)				137,678

9.1.8. Security against Building Rent

Details of security against building rent for the project are provided in Table 11.

Table 11 Security against Building Rent

Cost Item	Months	Unit Cos/Month (PKR)	Total Cost (PKR)
Security against Building Rent	3	70,000	210,000
Total			210,000

9.1.9. License, Permits etc.

The license fee for registering nursing care facilities is same in the province of Punjab and Sindh. For the purpose of this study, we are considering that licensing fee. The detail of authorities for registering nursing care facilities of all provinces are as under:

- Punjab Health Care Commission (PHC)
- Sindh health care commission (SHC)

- Khyber Pakhtunkhwa Health Care commission (KP-HCC)
- Balochistan hospital/clinics regulatory authority
- Health department Azad Jammu and Kashmir (AJ&K).
- Health department Gilgit Baltistan (GB).

Table 12 provides details of license and permits cost for the project.

Table 12 License, Permits, etc.

Cost Item	No.	Cost (PKR)
License, permits, etc. fee	1	5,000
Total		5,000

9.1.10. Working Capital Requirements

Table 13 provides details of working capital requirements for the project.

Table 13 Working Capital Requirements

Cost Item	No. of Months	Unit Cost (PKR)	Amount (PKR)
Equipment spare part inventory		7,419	7,419
Upfront building rent	1	70,000	70,000
Cash		500,000	500,000
Total			577,419

9.2. Breakeven Analysis

Breakeven analysis is provided in Table 14.

Table 14 Breakeven Analysis

Particulars	Amount First Year (PKR)	Ratios
Sales (PKR)	20,844,000	100%
Variable Cost (PKR)	16,822,158	81%
Contribution (PKR)	4,021,842	19%
Fixed Cost (PKR)	2,909,438	14%
Breakeven		
Breakeven (Days)		10,000
Breakeven Revenue (PKR)		15,078,744
Breakeven Capacity		43%

9.3. Revenue Generation

Table 15 provides details for revenue generation of the proposed project during the first year of operations, based on 60% capacity utilization.

Table 15 Revenue Generation

Services	Annual Capacity (Days)	Initial Operational Capacity @ 60% (Days)	Charges per Day (PKR)	Revenue (PKR)
Full Time Nursing Service	4,320	2,592	2,500	6,480,000
Assistant Nursing service	10,440	6,264	1,500	9,396,000
Care Keeper	8,280	4,968	1,000	4,968,000
Total	23,040	13,824		20,844,000

9.4. Variable Cost Estimate

Variable costs of the project have been provided in detail in Table 16.

Table 16 Variable Cost Estimate

Description of Costs	Total Cost (PKR)
Direct Labor	3,432,000
On Call Staff Wages	12,168,000
Utilities Cost	212,133
Machinery MaintenanceCost	89,025
Communications expense (phone, fax, mail, internet, etc.)	126,000
Office vehicles running expense	480,000
Office expenses (stationery, entertainment, janitorial services, etc.)	315,000
Total Variable Cost (PKR)	16,822,158

9.4.1. Direct Labor

Details of direct labor cost are provided in Table 17.

Table 17 Direct Labor

Post	No of personnel	Monthly Salary (PKR)	Annual Salary (PKR)
Full Time Staff			
Nurses-Males	1	50,000	600,000
Nurses-Females	1	50,000	600,000
Assistant Nurses-Males	2	30,000	720,000
Assistant Nurses-Females	2	30,000	720,000
Care Taker-Males	2	22,000	528,000
Care Taker-Females	1	22,000	264,000
Total Direct Labor	9		3,432,000

Table 18 On-Call Nursing Staff Cost

Particular	On-call staff time (Days)	No of personnel	Wages per Day (PKR)	Annual Wages (PKR)
Nurses	2,160	10	1,667	3,600,000
Assistant Nurse	5,400	25	1,000	5,400,000
Care Taker	4,320	20	733	3,168,000
Total		55		12,168,000

Table 19 Equipment Maintenance Cost

Particular	Machinery Cost	Rate	Total Cost (PKR)
Equipment Maintenance Cost	593,500	15%	89,025
Total			89,025

Table 20 Vehicle Maintenance Cost

Particulars	Motorcycle(s)	Carry Van	Total
Fuel cost per day	300	600	900
Monthly Fuel Cost	9,000	18,000	27,000
Monthly Service Charges	500	1,000	1,500

Monthly Oil & Tuning	500	1,000	1,500
Monthly expenses/ Motorcycle	10,000	20,000	30,000
No of Vehicles	2	1	3
Monthly vehicle running cost	20,000	20,000	40,000
Yearly Cost	240,000	240,000	480,000

Table 21 Variable Cost Assumptions

Description of Costs			Rate	Basis
Communications expense (phone, mail, internet, etc.)			10%	of administration expense
Office expenses (stationery, entertainment, janitorial services, etc.)			25%	of administration expense

9.5. Fixed Cost Estimate

Details of fixed cost for the project are provided in Table 22.

Table 22 Fixed Cost Estimate

Description of Costs	Amount (PKR)
Staff Salaries	1,260,000
Building rental expense	840,000
Promotional expense	312,660
Depreciation expense	468,243
Amortization of pre-operating costs	27,536
Amortization of legal, licensing, and training costs	1,000
Total Fixed Cost	2,909,438

Table 23 Staff Salaries

Post	No. of Personnel	Monthly Salary (PKR)	Annual Salary (PKR)
Admin. & Accounts Officer	1	40,000	480,000
Security	1	20,000	240,000
Office Boy	1	20,000	240,000
Driver	1	25,000	300,000

Total	4		1,260,000
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Table 24 Fixed Cost Assumptions

Description of Costs	Rate	Basis
Promotional Expense	1.5%	of revenue
Depreciation Expense		
Medical Apparatus	20%	of cost
Office Equipment/Office Vehicle/Furniture & Fixture	15%	of cost

9.6. Financial Feasibility Analysis

The financial feasibility analysis provides the information regarding projected Internal Rate of Return (IRR), Net Present Value (NPV) and Payback period of the study, which is shown in Table 25.

Table 25 Financial Feasibility Analysis

Description	Project
IRR	87%
NPV (PKR)	37,109,169
Payback Period (years)	1.81
Projection Years	10
Discount Rate used for NPV	15%

9.7. Financial Feasibility with 50% Debt Financing

The financial feasibility analysis provides the information regarding projected IRR, NPV and payback period of the study on the basis of Debt: Equity Model (50:50), which is shown in Table 26.

Table 26 Financial Feasibility Debt Financing

Description	Project
IRR	86%
NPV (PKR)	41,641,218
Payback Period (years)	1.85
Projection Years	10

Discount Rate used for NPV	13%
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9.8. Human Resource Requirement

For the 1st year of operations, the human resource requirements are projected in Table 27.

Table 27 Human Resource Requirement for the Nursing Center

Post	No.of Employees	Monthly Salary (PKR)	Annual Salary (PKR)
Nurses-Male	1	50,000	600,000
Nurses-Female	1	50,000	600,000
Assistant Nurse-Male	2	30,000	720,000
Assistant Nurse-Female	2	30,000	720,000
Care Taker-Male	2	22,000	528,000
Care Taker-Female	1	22,000	264,000
Admin.&Finance Officer	1	40,000	480,000
Security Guard	1	20,000	240,000
Office Boy	1	20,000	240,000
Driver	1	25,000	300,000
Total	13		4,692,000

Table 28 Human Resource Requirement- On Call Staff

Post	No.of Employees	Charges Per Day (PKR)
Nurses-Male	5	1,667
Nurses-Female	5	1,667
Assistant Nurse-Male	13	1,000
Assistant Nurse-Female	12	1,000
Care Taker-Male	14	733
Care Taker-Female	6	733
Total	55	

10. CONTACT DETAILS

Details of suppliers of medical equipment and machinery are provided in Table 29.

Table 29 Contact Details

Name of Medical Equipment Supplier	Origin/City	Address	Contacts
STRONGMAN	Karachi	95, Sharah-e-Quaideen Service Rd, G Block 2 Block 2 PECHS, Karachi	021-34541432
Sajjad Enterprises	Quetta	New Najam U Din Rd, Quetta,	0332 3801473
Al Ghani Medical and Surgical	Lahore	Plot No 3, behind Pakistan Mint, Mushtaq Colony Pakistan Mint Colony, Lahore	0321-6557789
Zelin Medical Systems Global Health Care	Rawalpindi	Midway Commercial Plaza No.20 Back Side Prism Arcade 2 Bahria Town, Phase 7 Rawalpindi, Islamabad Capital Territory	051-5172354
BIOMAX International	Faisalabad	Green View Rd, adjacent Hotel Prime view, Akbarabad, Faisalabad	0321-7576600
Noorani Surgical	Lahore	Noorani Mansion, Bank Square, Nila Gumbad, Lahore	042-37234000
ZASK Medical & Surgical Supplies	Peshawar	LG-04, Deans Medicine Center, opp. Hayatabad Medical Complex (HMC), Phase 4 Hayatabad, Peshawar	0345 9208142

11. USEFUL LINKS

Table 30 Useful Links

Name of Organization	E-mail Address
Small and Medium Enterprises Development Authority (SMEDA)	www.smeda.org.pk
National Business Development Program (NBDP)	www.nbdp.org.pk
Ministry of National Health Services Regulations and Coordination	www.nhsrsc.gov.pk
Specialized Healthcare & Medical Education Department	health.punjab.gov.pk/
Health Department Khyber Pakhtunkhwa	www.healthkp.gov.pk/
Health Department Government of Sindh	www.sindhhealth.gov.pk/
Health Department Government of Balochistan	www.balochistan.gov.pk/
Health Department AJ&K	www.health.ajk.gov.pk/
Punjab Healthcare Commission (PHC)	https://www.phc.org.pk/
Khyber Pakhtunkhwa Healthcare Commission (KP-HCC)	http://hcc.kp.gov.pk/
Sindh Healthcare Commission (SHC)	http://shcc.org.pk/
Pakistan Nursing Council	www.pnc.org.pk
Pakistan Medical Commission	www.pmc.gov.pk
Pakistan Demographic & Health (PDHS) Survey	www.nhsrsc.pk
Pakistan Bureau of Statistics	www.pbs.gov.pk/

12. ANNEXURES

12.1. Income Statement

Calculations	SMEDA									
Income Statement										
	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Revenue	20,844,000	24,854,154	29,460,457	34,742,296	40,789,000	47,701,036	55,591,348	61,187,544	67,347,090	74,126,697
<i>Cost of sales</i>										
On Call Staff Wages	12,168,000	13,514,904	14,947,800	16,477,753	18,117,168	19,879,942	21,781,637	22,584,956	23,466,197	24,432,918
Utilities Cost	212,133	231,303	252,205	274,996	299,846	326,942	356,487	388,702	423,827	462,127
Direct Labor	3,432,000	3,764,904	4,130,100	4,530,719	4,970,199	5,452,308	5,981,182	6,561,357	7,197,809	7,895,996
Machinery Maintenance - Cost	89,025	97,987	107,851	118,708	130,658	143,811	158,288	174,222	191,760	211,064
Total cost of sales	15,901,158	17,609,098	19,437,955	21,402,176	23,517,871	25,803,003	28,277,594	29,709,236	31,279,593	33,002,105
Gross Profit	4,942,842	7,245,056	10,022,502	13,340,120	17,271,129	21,898,033	27,313,754	31,478,308	36,067,498	41,124,592
<i>General administration & selling expenses</i>										
Management Staff	1,260,000	1,382,220	1,516,295	1,663,376	1,824,723	2,001,722	2,195,889	2,408,890	2,642,552	2,898,880
Building rental expense	840,000	924,000	1,016,400	1,118,040	1,229,844	1,352,828	1,488,111	1,636,922	1,800,615	1,980,676
Communications expense (phone, fax, mail, internet, etc.)	126,000	138,222	151,630	166,338	182,472	200,172	219,589	240,889	264,255	289,888
Office vehicles running expense	480,000	528,320	581,504	640,042	704,473	775,390	853,446	939,360	1,033,922	1,138,003
Office expenses (stationery, entertainment, janitorial services, etc)	315,000	345,555	379,074	415,844	456,181	500,430	548,972	602,222	660,638	724,720
Promotional expense	312,660	372,812	441,907	521,134	611,835	715,516	833,870	917,813	1,010,206	1,111,900
Depreciation expense	468,243	468,243	468,243	468,243	468,243	536,974	424,467	767,968	767,968	767,968
Amortization of pre-operating costs	27,536	27,536	27,536	27,536	27,536	-	-	-	-	-
Amortization of legal, licensing, and training costs	1,000	1,000	1,000	1,000	1,000	1,579	1,579	1,579	1,579	1,579
Subtotal	3,830,438	4,187,907	4,583,588	5,021,552	5,506,307	6,084,612	6,565,923	7,515,644	8,181,736	8,913,615
Operating Income	1,112,404	3,057,149	5,438,914	8,318,568	11,764,822	15,813,421	20,747,831	23,962,664	27,885,762	32,210,977
Gain / (loss) on sale of machinery & equipment	-	-	-	-	237,400	-	-	-	-	-
Gain / (loss) on sale of office equipment	-	-	-	-	-	-	141,875	-	-	-
Gain / (loss) on sale of office vehicles	-	-	-	-	-	-	319,413	-	-	-
Earnings Before Interest & Taxes	1,112,404	3,057,149	5,438,914	8,318,568	12,002,222	15,813,421	21,209,119	23,962,664	27,885,762	32,210,977
Subtotal	-	-	-	-	-	-	-	-	-	-
Earnings Before Tax	1,112,404	3,057,149	5,438,914	8,318,568	12,002,222	15,813,421	21,209,119	23,962,664	27,885,762	32,210,977
Tax	260,550	384,287	1,051,674	2,031,498	3,320,777	4,654,697	6,543,191	7,506,932	8,880,016	10,393,841
NET PROFIT/(LOSS) AFTER TAX	851,854	2,672,862	4,387,240	6,287,070	8,681,445	11,158,724	14,665,928	16,455,732	19,005,746	21,817,136

12.2. Balance Sheet

Calculations	SMEDA										
Balance Sheet											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
Assets											
<i>Current assets</i>											
Cash & Bank	500,000	1,414,177	3,024,880	4,929,889	7,074,046	8,639,165	11,414,625	22,699,386	39,905,356	59,658,808	82,438,107
Equipment spare part inventory	7,419	8,947	10,789	13,012	15,692	18,924	22,821	27,521	33,190	40,026	-
Pre-paid building rent	70,000	77,000	84,700	93,170	102,487	112,736	124,009	136,410	150,051	165,056	-
Total Current Assets	577,419	1,500,124	3,120,369	5,036,070	7,192,225	8,770,825	11,561,456	22,863,317	40,088,597	59,863,890	82,438,107
<i>Fixed assets</i>											
Building/Infrastructure	120,200	108,180	96,160	84,140	72,120	60,100	48,080	36,060	24,040	12,020	-
Medical Apparatus	593,500	474,800	356,100	237,400	118,700	937,158	749,727	562,295	374,863	187,432	-
Furniture & fixtures	405,000	344,250	283,500	222,750	162,000	101,250	40,500	767,722	652,564	537,406	422,247
Office vehicles	1,277,650	1,086,003	894,355	702,708	511,060	319,413	127,765	1,946,630	1,654,636	1,362,641	1,070,647
Office equipment	567,500	482,375	397,250	312,125	227,000	141,875	56,750	1,075,759	914,395	753,031	591,667
Security against building	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000	210,000
Total Fixed Assets	3,173,850	2,705,608	2,237,365	1,769,123	1,300,880	1,769,796	1,232,822	4,598,467	3,830,498	3,062,530	2,294,562
<i>Intangible assets</i>											
Pre-operation costs	137,678	110,142	82,607	55,071	27,536	-	-	-	-	-	-
Legal, licensing, & training costs	5,000	4,000	3,000	2,000	1,000	7,895	6,316	4,737	3,158	1,579	12,467
Total Intangible Assets	142,678	114,142	85,607	57,071	28,536	7,895	6,316	4,737	3,158	1,579	12,467
TOTAL ASSETS	3,893,947	4,319,873	5,443,341	6,862,264	8,521,640	10,548,516	12,800,593	27,466,521	43,922,253	62,927,999	84,745,135
Liabilities & Shareholders' Equity											
<i>Current liabilities</i>											
<i>Shareholders' equity</i>											
Paid-up capital	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947	3,893,947
Retained earnings		425,927	1,549,394	2,968,317	4,627,694	6,654,569	8,906,647	23,572,575	40,028,307	59,034,053	80,851,189
Total Equity	3,893,947	4,319,873	5,443,341	6,862,264	8,521,640	10,548,516	12,800,593	27,466,521	43,922,253	62,927,999	84,745,135
TOTAL CAPITAL AND LIABILITIES	3,893,947	4,319,873	5,443,341	6,862,264	8,521,640	10,548,516	12,800,593	27,466,521	43,922,253	62,927,999	84,745,135

12.3. Cash Flow Statement

Calculations											SMEDA
Cash Flow Statement											
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10
<i>Operating activities</i>											
Net profit		851,854	2,672,862	4,387,240	6,287,070	8,681,445	11,158,724	14,665,928	16,455,732	19,005,746	21,817,136
Add: depreciation expense		468,243	468,243	468,243	468,243	468,243	536,974	424,467	767,968	767,968	767,968
amortization of pre-operating costs		27,536	27,536	27,536	27,536	27,536	-	-	-	-	-
amortization of License Cost		1,000	1,000	1,000	1,000	1,000	1,579	1,579	1,579	1,579	1,579
Equipment inventory	(7,419)	(1,528)	(1,843)	(2,222)	(2,680)	(3,232)	(3,898)	(4,700)	(5,668)	(6,836)	40,026
Pre-paid building rent	(70,000)	(7,000)	(7,700)	(8,470)	(9,317)	(10,249)	(11,274)	(12,401)	(13,641)	(15,005)	165,056
Cash provided by operations	(77,419)	1,340,104	3,160,097	4,873,326	6,771,851	9,164,742	11,682,106	15,074,872	17,205,970	19,753,452	22,791,766
<i>Financing activities</i>											
Issuance of shares	3,893,947	-	-	-	-	-	-	-	-	-	-
Cash provided by / (used for) financing activities	3,893,947	-	-	-	-	-	-	-	-	-	-
<i>Investing activities</i>											
Capital expenditure	(3,316,528)	-	-	-	-	(945,054)	-	(3,790,112)	-	-	(12,467)
Cash (used for) / provided by investing activities	(3,316,528)	-	-	-	-	(945,054)	-	(3,790,112)	-	-	(12,467)
NET CASH	500,000	1,340,104	3,160,097	4,873,326	6,771,851	8,219,689	11,682,106	11,284,761	17,205,970	19,753,452	22,779,299

13. KEY ASSUMPTIONS

13.1. Operating Cost Assumptions

Table 31 Operating Cost Assumptions

Description	Details
Building rent growth rate	10%
Furniture and fixture depreciation	15%
Vehicle depreciation	15%
Office equipment depreciation	15%
Inflation rate	10.1%
Wage growth rate	9.7%
Electricity price growth rate	9.0%
Office equipment price growth rate	9.6%
Office vehicle price growth rate	6.2%

13.2. Revenue Assumptions

Table 32 Revenue Assumptions

Description	Details
Service Price Growth Rate	10.1%
Capacity Utilization	60%
Capacity Utilization Growth Rate	5%
Maximum Capacity	90%

13.3. Financial Assumptions

Table 33 Financial Assumptions

Description	Details
Project life (Years)	10
Debt: Equity	0:100
Discount Rate used for NPV (100% Equity)	15%
Discount Rate used for NPV(50:50 Debt: Equity)	13%

Small and Medium Enterprises Development Authority

HEAD OFFICE

4th Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road, Lahore
Tel: (92 42) 111 111 456, Fax: (92 42) 36304926-7

www.smeda.org.pk, helpdesk@smeda.org.pk

REGIONAL OFFICE PUNJAB	REGIONAL OFFICE SINDH	REGIONAL OFFICE KPK	REGIONAL OFFICE BALOCHISTAN
3 rd Floor, Building No. 3, Aiwan-e-Iqbal Complex, Egerton Road Lahore, Tel: (042) 111-111-456 Fax: (042) 36304926-7 helpdesk.punjab@smeda.org.pk	5 TH Floor, Bahria Complex II, M.T. Khan Road, Karachi. Tel: (021) 111-111-456 Fax: (021) 5610572 helpdesk-khi@smeda.org.pk	Ground Floor State Life Building The Mall, Peshawar. Tel: (091) 9213046-47 Fax: (091) 286908 helpdesk-pew@smeda.org.pk	Bungalow No. 15-A Chaman Housing Scheme Airport Road, Quetta. Tel: (081) 831623, 831702 Fax: (081) 831922 helpdesk-qta@smeda.org.pk