# **Impact India - Lifeline Express**

# **Operating Manual**





IMPACT INDIA FOUNDATION

# Donations to Impact India Foundation are exempt under the Income Tax Act, 1961 as follows.

100% Tax exemption under section 35AC50% Tax exemption under section 80G

First Edition Second Edition Third Edition Fourth Edition

: Sponsored by Rajiv Gandhi Foundation

: Published in-house - February 2000

: Published in-house - December 2001

: Published in-house - July 2009



# CONTENTS

<u>Topic</u>		Page	
1. 2. 3.	Foreword Introduction Acknowledgements	3 4 6	
Chap	ter 1 : What is IMPACT INDIA-LIFELINE EXPRESS?	7	
IMPA	CT India and the LIFELINE EXPRESS	7	
LIFEL	INE EXPRESS – the Concept	8	
LIFEL	INE EXPRESS as a Community Health Project	9	
LIFEL	INE EXPRESS as a Benefit to the Sponsor	11	
Chapter 2: Layout and Staffing Pattern		12	
Physic	cal Layout	12	
Coach	nes and Compartments	12	
List of	Equipment	20	
Staff		21	
Chapter 3: Pre Project Preparations		22	
	of Contract between Impact India Foundation and porator/Sponsor	22	
Forma	ation of a Team at the Collaborator's Level	24	
Select	tion of Venue	25	
Plann	ing	25	
Prepa	ration of Budget	27	
Public	ity and Communications Material	28	



Topic	<u>Page</u>	
Chapter 4: Pre-Project Preparations: Local Level and at Site		
Railways	31	
Cooperation from Local Government Officials and Voluntary Organisations	32	
Preparation of Site	35	
Transport	38	
Audio System	38	
Travel and Living Arrangements for Medical Staff, Visitors,	38	
Media and Volunteers	38	
Accommodation and Food for Patients	39	
Pre-Preparation at Local and Programme Levels	39	
Chapter 5: A Diagnostic and Surgical Programme for the Orthopaedic, Sight and Hearing Disabled and Cleft Lip		
Publicity and Promotion	41	
Designated Spokespersons	43	
Screening Patients at Local Level	43	
(Before Patients come to the Hospital Train)		
Briefing of Medical Coordinators/Leaders	47	
Guidelines for Sequence of Handicaps Handled	50	
Planning of the Programme (with checklists)		
Conclusion		
List of Appendixes - I to XV		



# FOREWORD

The LIFELINE EXPRESS of Impact India Foundation is a revolutionary concept in the medical field. This well-equipped Hospital-On-Wheels reaches those parts of India where medical facilities are scarce and provides much needed sophisticated medical care, free of cost. The Rajiv Gandhi Foundation has been proud to have collaborated with IMPACT India in bringing these services to the less privileged.

In this venture where experts from medical and technical fields pool their talents and resources, there is a need for proper information systems. The "User's Manual" is helpful in evolving an information system where the entire data is at one's finger tips.

The "User's Manual" is comprehensive, covering every aspect of information regarding the project. At the same time, it is simple, clear and direct. It is a laudable effort which could help in strengthening the organization of LIFELINE EXPRESS projects. I hope that this Manual will be put to maximum use so that services of IMPACT INDIA-LIFELINE EXPRESS can be made more effective, besides providing a fund of information to the experts involved in this noble task.

Sonia Gandhi



# INTRODUCTION

It has been an exciting journey since Impact India Foundation first launched Its LIFELINE EXPRESS on July 16, 1991. A venture which started as a response to the urgent needs of the handicapped in remote, inaccessible areas has now attracted a lot of national and international attention. This Manual is for organisations and individuals who wish to know how the LIFELINE EXPRESS concept is translated into reality.

The purpose of the Manual is three-fold: It is a detailed guide to conducting a LIFELINE EXPRESS programme. It also serves as a guide for consultation in order to replicate LIFELINE EXPRESS projects within India and in other countries. For students, journalists and researchers, the Manual may serve as a useful reference document.

A Manual for a field-based organization and project must be only a guide, not an instructor, for field realities vary in each situation. Flexibility and adaptation to local conditions are the hallmark of all LIFELINE EXPRESS programmes. Finally, the Manual is not meant to record only what is being done, but to indicate what can be done by a project such as IMPACT INDIA-LIFELINE EXPRESS. While based on the LIFELINE EXPRESS experiences, this Manual will, we hope, assist many other similarly oriented efforts. IMPACT India is committed to sharing its experience and to assist others in setting up similar projects. Equally, Impact India expects to learn from national and international organisations.

IMPACT INDIA-LIFELINE EXPRESS commenced its adventurous journey with three coaches on 16<sup>th</sup> July 1991. Subsequently, one more coach was added, making the LIFELINE EXPRESS a complete hospital with testing facilities and an auditorium for training of local doctors. On July 12, 2007 Mrs. Sonia Gandhi and Railway Minister Mr. Lalu Prasad inaugurated, a custom-built, five-coach, new LIFELINE EXPRESS designed at the Integral Coach Factory, Chennai.

Impressed by its immediate response during earthquakes the National Disaster Management Authority of India has included IMPACT INDIA-LIFELINE EXPRESS as a prime resource during times of disaster. The Government of India's Department of Posts & Telegraphs commissioned the release of a Special Cover and Cancellation Stamp at the inauguration of the 100<sup>th</sup> project of IMPACT INDIA-LIFELINE EXPRESS on April 26, 2008.

In recognition of Impact India Foundation's humanitarian work for the disabled poor of our country, the Government of India has recently released a National Postage Stamp and a First Day Cover honoring the Life Line Express-The world's first hospital on a train.



Impact India was established on October 2<sup>nd</sup> 1983, Mahatma Gandhi's birthday, not just as a token of our appreciation to the Mahatma but it was something more heart felt. You will see the Mahatma watching over the train as he has done right from the beginning. What has brought the most satisfaction is the happiness that IMPACT INDIA-LIFELINE EXPRESS has brought to the rural people by the changes that have been effected in their lives and, to the many others we have not treated, it has given hope.

conde

A.H. Tobaccowala, Chairman



# ACKNOWLEDGEMENTS

The Manual is the result of the collective efforts of IMPACT India Foundation's staff, associates and friends.

We thank the Indian Railways, Ministry of Health and the Ministry of Social Welfare for their cooperation.

The Chief Executive Officer of IMPACT India Foundation, Zelma Lazarus, provided the overall guidance for the preparation of the Manual.

Special thanks are due to Col. Randhir Singh Vishwen, Chief Executive, LIFELINE EXPRESS and the LIFELINE EXPRESS staff for their cheerful cooperation.

We thank Neelam Kshirsagar, Deputy General Manager, Special Projects for editing and supervising the production of the Manual with the help of G.N. Nair and we appreciate the patience with which Genevieve D'Souza prepared the revised text.



# CHAPTER 1

#### WHAT IS IMPACT INDIA-LIFELINE EXPRESS?

#### I. IMPACT INDIA AND THE LIFELINE EXPRESS

IMPACT is an International Initiative against Avoidable Disablement, promoted by the UNDP, UNICEF, and the WHO in association with the Governments of each participating country. Impact acts as a leader catalyst to bring together business houses, Non-Government organisations, the medical profession and the local community in rural health projects, using available delivery systems and existing infrastructure. India was chosen to be the site of the global launch of IMPACT and accordingly, the Impact India Foundation (IIF) is the first of 19 Foundations worldwide. It was registered in January 1984 as a Charitable Trust.

Impact India's LIFELINE EXPRESS is based on a simple concept of bringing free medical facilities and surgical interventions on a train to the underserved communities of the Indian sub-continent by utilising the 86,526 kilometres (kms) of broad-gauge Indian rail track. Interestingly, it was none other than Pandit Jawaharlal Nehru, the first Prime Minister of India, who first had the vision to use the vast network of Indian Railways to deliver essential services to remote, rural areas of India. The Indian Railways is the premier transport organization of the country, the largest rail network in Asia and the second largest in the world.

With the initiative of Impact India Foundation, the cooperation of the Indian Government, particularly the Indian Railways and Health Ministries, international and national welfare organisations, corporate houses and individual experts, the LIFELINE EXPRESS, the world's first hospital train was launched on 16<sup>th</sup> July 1991.

Impressed by its immediate response during earthquakes the National Disaster Management Authority of India has included Impact India's LIFELINE EXPRESS as a prime resource during disaster. Inspired by Impact's excellent track record, the Indian Railways have produced a custom-built, five-coach, new LIFELINE EXPRESS for Impact India which was inaugurated by Mrs. Sonia Gandhi and Railway Minister Mr. Lalu Prasad on July 12, 2007 at the National Rail Museum in New Delhi.



#### II IMPACT INDIA-LIFELINE EXPRESS: THE CONCEPT

If disabled persons cannot reach a hospital, then the hospital should reach them. The seed of an idea – so powerful and yet so simple – has taken shape as the World's first Hospital-On-Rails. Attracting worldwide attention, IMPACT INDIA-LIFELINE EXPRESS never fails to evoke a positive response in all who are associated with it. India's awesome railway network consists of more than 108,706 kilometres of rail track over which ply nearly 11,000 train routes with 7,000 sidings.

This is where lies the awe-inspiring potential of bringing vital health services to the remotest corners of the country. IMPACT INDIA-LIFELINE EXPRESS consists of five railway coaches, with two Operation Theatres, equipped with sophisticated medical and surgical facilities, as well as a training centre for Doctors, which is attached to the train, to travel to far away villages. At a selected destination, it is parked at a railway siding for a period of approximately 20 days. It provides on-the-spot diagnostic, medical and surgical treatment, completely free of charge, to those with orthopaedic disabilities, hearing and visual handicaps as well as post burn contractures and cleft lips. Each project presents a gigantic and complex exercise in planning, meticulous coordination and action by various bodies. Typically the following are involved:

- The Sponsor or Collaborator who may be an Indian Business House, Foundation, Institution, or the State / Central Government.
- The Government's Ministry of Health & Family Welfare, Social Welfare, and through them, the various local, State and Central Government agencies working in the rural areas.
- The Indian Railways, for coordinating the movement of IMPACT INDIA-LIFELINE EXPRESS, parking facilities at sidings along with provision for water, electricity and levelling land at the siding.
- NGOs to take care of the minute, local details at the site create awareness about IMPACT INDIA-LIFELINE EXPRESS as well as mobilise volunteers.
- Medical and Para-medical professionals, who provide their services and expertise on a voluntary basis.
- The mass media to help create public awareness.
- And finally, the beneficiaries for whom this entire exercise is targeted.

The organization which coordinates this effort, virtually the nerve center of the entire operation, is Impact India Foundation. As a result of the effectiveness and massive outreach of this project, IMPACT INDIA-LIFELINE EXPRESS has been replicated in Central South Africa and China, the latter has three hospital trains and more are planned. Bangladesh has replicated the concept into a Riverboat hospital named 'JIBON TARI', appropriate to the existing network of rivers in the land and Cambodia with the "The Lake Clinic-1".



#### III IMPACT INDIA-LIFELINE EXPRESS AS A COMMUNITY HEALTH PROJECT

The services available on IMPACT INDIA-LIFELINE EXPRESS are:-

- Restoration of mobility in limbs through corrective surgeries to orthopaedically handicapped persons and provision of calipers or other assistive devices.
- Restoration of sight through cataract operations, Intra Ocular Lens implants, generally providing suitable spectacles.
- Identifying refractive errors, through an Auto Refract meter. Diagnosis through the Slit Lamp and provision of medication for eye ailments.
- Surgery for hearing disorders and provision of hearing aids.
- Health counseling, guidance and referral services.
- Correction of Cleft Lips through surgeries.
- Provide basic dental treatment like filling, extraction and scaling.
- Follow-up of Patients' progress through arrangements with local authorities.
- Training local Doctors as well as updating local Surgeons with the latest surgical technologies in a specially constructed training centre on the fifth coach.
- Computerized Patients Records & Management System.
- Preventive services in the form of immunization, administration of nutrients, and creating health awareness among the deprived in the neglected rural and semi-urban areas.
- Workshops to help impart knowledge to the disabled.

By ensuring access to such services for the needy in the underserved remote areas, IMPACT INDIA-LIFELINE EXPRESS not only renders much-needed service but also emphasizes the demand for this crucial input among the local Government and voluntary health authorities of the area who are involved in all aspects of the project, and are encouraged to provide follow-up services after IMPACT INDIA-LIFELINE EXPRESS has departed. It leaves behind much greater awareness and a better motivated administration for the handicapped. It serves a similar purpose among the voluntary agencies and the general population. IMPACT INDIA-LIFELINE EXPRESS

#### MANUAL ON IMPACT INDIA-LIFELINE EXPRESS



demonstrates that excellent medical facilities, on par with the best in urban areas, can be provided to the poorest of the poor in rural locations, and thereby models best practices for the State. And last, but not the least, it creates awareness about this easily replicable project.

At the macro level too, IMPACT INDIA-LIFELINE EXPRESS creates awareness and motivation for the cause of the handicapped across a wide cross section of society, since various agencies, particularly the Government, business houses, voluntary organizations and individual volunteers, are involved in each project. The extensive media coverage, which the LIFELINE EXPRESS invariably generates, also aids this process and consequently, the impact created is beyond the medical services provided by each individual project. Impact India and its LIFELINE EXPRESS are committed to combating the appalling loss of productive life and economic potential of the disabled, by reversing disabilities.

One coach serves as a self-contained unit consisting of an Operation Theatre and Recovery Room with its own Gen-set and facilities during disaster which at any time can be detached from the hospital train and can work as a stand-alone hospital unit.



The Lifeline Express served several thousand at Ajar after the earthquake in 2001.



#### IV IMPACT INDIA-LIFELINE EXPRESS AS A BENEFIT TO THE SPONSOR

While IMPACT INDIA-LIFELINE EXPRESS is mainly identified as a community health project, and rightly so, it must be emphasised that the project has another equally important facet. It is an exercise in Public Relations by the Corporate sector.

LIFELINE EXPRESS projects are conducted in collaboration with a business or other partner. The Corporate Collaborator and Impact India share a joint responsibility not only financially, but also in every aspect of the organisational function of the project. This is because Impact India demands from every Sponsor/Collaborator complete commitment, not only for the duration of the project but also for follow-up. In real terms, this translates into weeks of planning, coordination, and action, including liaising with various agencies and follow up.

Inevitably, the corporate Sponsor/Collaborator stands to gain tangibly in terms of Public Relations, as it is seen by the media and society to be fulfilling a much needed health requirement of the rural masses.

In this regard, Public Relations may be quantified, as:

- 1. The Collaborators are identified as organisations which care, and are concerned not only with profits but also social responsibilities. The philanthropic side of the corporate Collaborator image is portrayed effectively.
- 2. A related gain is that such a project can achieve tremendous goodwill among specific audiences identified by the Collaborators.
- 3. Much liaising is required for a project, which is actively conducted by the Collaborators. This helps develop and nurture contacts, both at the local and State levels.
- 4. Publicity and promotion being a vital part of the project, helps corporate Sponsors/Collaborators to interact with the media. Each project has been exhaustively covered by regional, national and even International publications like Newsweek, Time, London Times, etc., as well as T.V. documentaries by CNN, B.B.C, MVC Paris, Japanese News-Tokyo, ARD, ZDF-Germany to name a few.
- 5. The hands-on participation by employees of corporate Collaborators has numerous gains – they work as a team to make the project a success, creating a team spirit, which lasts well beyond the project's duration. Such a venture arouses feelings of participation, a sense of pride and sensitivity to social issues among the corporate employees, which mere donations cannot hope to arouse.
- 6. The project leaves behind a better motivated administration and greater involvement of the voluntary and private sectors.



### CHAPTER 2

#### LAYOUT AND STAFFING PATTERN

It is often difficult to envisage a Hospital-On-Rails without having seen it. It is important to detail the structure of IMPACT INDIA-LIFELINE EXPRESS and the functioning of its staff, not only to demonstrate its capabilities to undertake the medical tasks it seeks to fulfill, but also to provide a complete guide to those who would like to replicate this project.

#### AN OVERVIEW OF IMPACT INDIA-LIFELINE EXPRESS

The Integral Coach Factory, Chennai (ICF) of the Indian Railways has manufactured 'LIFELINE EXPRESS' coaches for Impact India Foundation, Mumbai for the purpose of rendering free medical services to the General Public all over India. These coaches are made as an improved version of the original LIFELINE EXPRESS coaches operated by Impact India Foundation since 1991 for this noble cause.

#### I PHYSICAL LAYOUT

Five new railway coaches were completely designed by engineering and medical consultants and furnished into a fully functional, air-conditioned hospital, equipped with all modern, medical and surgical facilities. Indian Railways readily came forward with both men and material. The staff of the Integral Coach Factory, Chennai, enthusiastically fitted the coaches and transformed them once again into a rail-worthy train, with a brightly painted exterior. (Appendix I)

#### II COACHES AND COMPARTMENTS:

There are two entry/exit doors from the front and the rear of the train. The commonly used door is from the rear, with the front entry/exit being reserved for Patients.

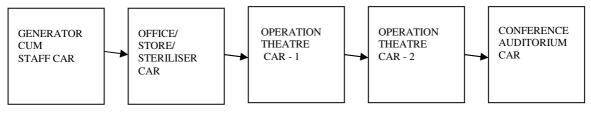
The rake consists of five coaches:

- 1. Generator cum Staff Car
- 2. Office/Store/Steriliser Car
- 3. Operation Theatre Car 1
- 4. Operation Theatre Car -2
- 5. Conference Auditorium Car



#### MANUAL ON IMPACT INDIA-LIFELINE EXPRESS

#### **Rake formation**



The rake has the following sources of power supply arrangements.

- Self-generation system This arrangement is required whenever the train is moved from one place to another place. The staff of Impact India always stay on the train, even during movement between locations, therefore minimum power supply for lights and fans is required.
- End-on Generation System Whenever the train is stationed at a particular location, the power supply requirement for the entire rake is met from the Diesel Alternator (DA) sets.
- 3. **External supply** Whenever the rake is placed at a particular location, the power supply requirement for the entire rake or part of the rake is met from the local power supply available from the Electricity Board of that area.

Normally all the five coaches consist of a rake which is moved for rendering medical services. In the case of extreme emergencies and disasters, Operation Theatre Car-2 will be used as a stand-alone Hospital unit for which all the above-mentioned sources of power supply arrangements have been provided.

In order to meet the above requirement, the following arrangements are made in consultation with Impact India's officials.

#### Self-generation system:

In the Office/Store/Steriliser car, one set of self-generation equipment is provided for the Air Conditioned (AC) coaches. Details of items provided are listed below.

a. 25KW bogie mounted brushless alternators

with associated rectifier cum regulator units - 2 sets

- b. 1100 Ah VRLA type sealed maintenance free battery 1 set
- c. 200 Amps capacity Battery charger 1 No.

The 110 volts dc source from the above equipment feed other coaches through 125 amps dc rated inter-vehicle coupler arrangement. This arrangement meets the electrical needs of the following coaches:

Generator cum Staff Car

Office/Store/Steriliser Car

Operation Theatre Car – 1

Conference Car



In the Operation Theatre Car-2 coach, one set of self-generation equipment is provided for AC coaches. Details of items provided are:

a.	25KW bogie mounted brushless alternators		
	with associated rectifier cum regulator units	- 1 set	
b.	500 Ah VRLA type sealed maintenance free battery	- 1 set	

c. 200 Amps capacity Battery charger - 1 No.

#### End-on generation system:

#### Generator cum staff car

In the Generator cum Staff car, two 200KVA DA sets delivering 415 volts, threephase, 50Hz are provided. Normally, only one DA set is utilised and the other DA set is kept as a stand-by. The power supply from 200KVA meets the electrical load requirement for all types of coaches. One fresh air fan is provided to cool the DA set.

#### Office/store/steriliser car

This coach is an Air-conditioned coach for which one RMPU is provided. In this coach are:

- a. Office
- b. Drawing/Meeting room
- c. Medicine storage room
- d. Steriliser room
- e. Changing room

The Office has one Personal Computer. The Store room contains one Refrigerator for injections and other medicines required to be stored under cool conditions. In order to ensure the power availability for this machinery during movement, as well as at stations, one 2.5KVA inverter 110 volts dc/230 volts ac is provided.

In the Steriliser room two Autoclaves, each of 18KW, are provided. The Autoclaves are used for sterilising surgical instruments.

The toilet has one 15 litre-capacity geyser and one hand dryer. Exhaust fans are provided in the steriliser room and toilet.



#### **Operation Theatre car – 1**

This coach is an Air-conditioned coach for which one RMPU is provided. This coach contains an Operation Theatre and a Recovery Room. In the Operation Theatre, three Operation Tables are available.

Each Operation Table has the following medical equipment:

- i. Anaesthetic equipment
- ii. Shadowless lights
- iii. Boyles Apparatus with Halothene Vapouriser
- iv. Operating microscope
- v. Multi-purpose monitor
- vi. Defibrillator
- vii. Diathermy Cautery Machine
- viii. Anaesthesia Ventilator
- ix. Instruments Trolley

Inside the Operation Theatre, crash trolleys with additional instruments are available. In addition, Air sterilisers and Air curtains are provided to keep the conditioned cool air pollution-free.

The Recovery Room has six beds.

The 415 volts, three-phase AC supply from the DA set is fed to the other coaches through 380 amps, three-phase rated inter-vehicle coupler arrangement.

The Operation Theatre Car -2 coach has been provided with one 75KVA DA set delivering 415 volts, three-phase, 50Hz for whenever this coach is required to work as a stand-alone Hospital unit.

#### External Supply arrangement:

In each coach, a terminal arrangement suitable for 415 volts, three-phase distribution has been provided, so that the power supply requirement of the respective coaches can be ensured.

Each coach also has a changeover switch arrangement for selecting power supply either from the 200KVA DA set or from an external source of supply. In the Operation Theatre Car -2 coach, a changeover switch arrangement for selecting power supply from the 200KVA or from the 75 DA set or from external source of supply has been provided.



#### Generator cum staff car

This coach has 12 berths for the staff, namely Operation Theatre Assistants, Electrician, Clerical staff, Driver of the vehicle and Cook, who accompany the train. This coach also contains a pantry room consisting of the following items:

- a. A gas-operated four-burner stove
- b. A chimney
- c. A refrigerator
- d. A microwave oven
- e. A geyser
- f. A water purifier

In the toilet, one geyser of 15 litre capacity and one exhaust fan, working on 110 volts ac supply, are available for use of the staff.

The power supply requirement for the above equipment is taken from a 200KVA set whenever the coach is stationed. During movement, the power supply required for the above equipment is taken from 10KVA, 110 volts dc/230 volts ac, one-phase under slung mounted inverter. A changeover switch is also available for the selection of power supply from Feeder (DA set / External supply) or from Inverter supply.

One 15 litre-capacity geyser and hand dryer are placed near the wash area for the use of the medical team.

Some of the medical equipment require an un-interrupted power supply for which one 2KVA capacity UPS is provided. The remaining medical equipment works under controlled power supply for which one 10KVA capacity stabilizer is available.



#### **Operation Theatre car – 2**

This coach is an Air-conditioned coach for which one RMPU is provided. This coach also contains an Operation Theatre and a Recovery Room. In the Operation Theatre, two Operation Tables are available for the conduct of surgeries.

The Recovery Room has four beds.

This coach has one Autoclave of 18KW capacity. All other facilities in the Operation Theatre Car - 1 are also available in this coach.



#### **Conference car**

This coach is an Air-conditioned coach for which one RMPU is provided. In this coach the following facilities are available.

- a. Conference room
- b. Ophthalmic room
- c. Audiometer room
- d. X-Ray room

In the Conference area, workshops and presentations are conducted for the public. For this purpose, this auditorium is provided with the following facilities.

- a. LCD TV
- b. DVD player
- c. Amplifier
- d. Speakers



The LCD TV and Speakers (portable type) are used for organising general awareness programmes for the public. A common amplifier is used for both purposes with a suitable changeover arrangement.

#### CCTV arrangement

Operations conducted in the Operation Theatre Car-1 can be viewed in the Conference Room for which the following arrangements have been made.

#### **Operation Theatre Car – 1**

- a. A camera is provided at one corner of Operation Theatre Car-1 to view the activities inside the entire Operation Theatre area.
- b. Whenever, there is a need to observe the operations from a closer point of view, the camera can be either mounted on the first Operation Table or the Third Operation Table.
- c. One can also view through a microscope when it is used for performing an operation on the second Operation Table.

#### **Operation Theatre Car – 2**

One can view through a microscope whenever it is used for performing an operation at any one of the Operation Tables.

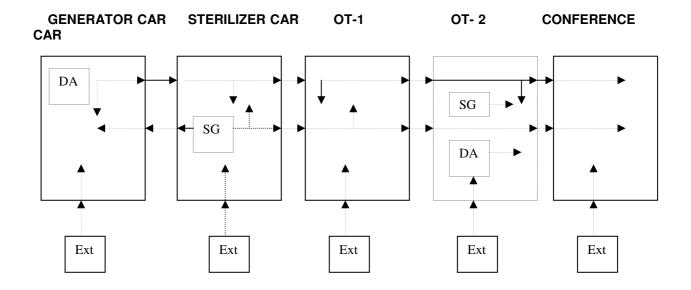
At any point of time the above-mentioned activities can be viewed on the LCD TV provided inside the Conference Car.

#### <u>General</u>

- I The Generator cum Staff Car and Conference Car are positioned at the ends of the LLE rake. Hence both types of coaches have Guard Rooms as a mandatory requirement for movement of the rake from one place to the other.
- ii. All Lights and Fans provided in the coaches, work on 110 volts dc supply, except the fans provided in the Conference Room which work on 230 volts ac supply. The fans provided in the Conference Hall are wall mounted.
- iii. Electron beam irradiated copper cables have been used for all wiring purposes.
- iv. Water raising monobloc pumps have been provided in Office/Store/Sterilizer Car, Operation Theatre Car –1, Operation Theatre Car 2 and Conference Car. In the Generator cum Staff Car side water filling arrangement is made available as the water tanks provided in this coach are mounted overhead.
- v. Telephone points have been provided in the Office/Store/Sterilizer Car, Conference Car and Generator cum Staff Car and are interconnected for communication purposes. An external telephone connectivity arrangement has been provided at one end of the Generator cum Staff Car and Conference Car.



#### DIAGRAM OF ELECTRICAL POWER DISTRIBUTION OF IMPACT INDIA-LIFELINE EXPRESS



DA - DIESEL ALTERNATOR SET

SG - SELF GENERATING SYSTEM

EXT - EXTERNAL SUPPLY ARRANGEMENTS

#### MANUAL ON IMPACT INDIA-LIFELINE EXPRESS



- III LIST OF EQUIPMENT AND CAPITAL ASSETS:
- 1) Suction Machine: Used post-operation to clear patient's respiratory tract.
- 2) Boyle's Apparatus: Anaesthesia machine, using Nitrous Oxide (N2O) and Oxygen.
- 3) Autoclave Machine: Sterilises surgical instruments
- 4) Surgical Microscope: Used for Eye and ENT surgery
- 5) Operation Tables: Self explanatory
- 6) Mini Vidas: HIV & Hormones test
- 7) Portable X-Ray Machine: Used for chest / face / Orthopaedic X-rays
- 8) Caratometer: Checks curvature of the cornea
- **9) Multipurpose Monitors:** Checks pulse, SPo2, Temperature, BP & Co2 of patient during surgery.
- 10) Shadowless lights: Used during operations
- **11) Defibrilator:** Used to restore normal rhythm of the heart.
- 12) A-Scan: Eye sonography, in conjunction with caratometer
- 13) Auto Refractometer: Checks eye-power (for prescription glasses)
- 14) Dia Thermy Cautry Machine: Used to cauterize / seal blood vessels
- 15) Audiometer: Tests hearing ability through the ear canal and mastoid bone
- **16) ECG Machine:** for checking the Cardiac Pulse rate.
- 17) Pulse Oximeter: Used during surgery for showing pulse rate and saturation
- **18)** Ventilator: Used during operation for General Anaesthesia
- 19) Electrically Operated Dental Chair Unit with accessories
- 20) Floor Mounted Digital X-Ray Machine (Dental)
- 21) Computer: Stores patients' records
- 22) Fax Machine: Self explanatory
- 23) Slit lamp: Used in eye checking
- 24) All Surgical Instruments required for Cleft lip, Orthopaedic, Hearing & Cataract Surgeries
- 25) LCD TV
- 26) CCTV Camera



#### IV STAFF

IMPACT INDIA-LIFELINE EXPRESS is one of Impact India Foundation's major projects. The headquarters' staff at Mumbai offers administrative and other support to IMPACT INDIA-LIFELINE EXPRESS.

Impact India employs separate staff for the LIFELINE EXPRESS.

- The Chief Executive of THE LIFELINE EXPRESS reports on all matters to the Chief Executive Officer of Impact India Foundation. The job profile includes liaising with future Collaborators and the Railways at all stages, and coordination with the Central & State Governments, sponsors and local voluntary agencies.
- The Chief Executive of THE LIFELINE EXPRESS, who travels with the hospital train, administers the day-to-day activities of the project and its staff, and interacts with Collaborators on a daily basis at site. In addition the incumbent is required to stock, check and procure essential items whenever the need arises and is responsible for daily accounts and records.

Apart from the senior functionaries, THE LIFELINE EXPRESS also has seven **Operation Theatre Assistants.** Their job is to prepare the Operation Theatre equipment for surgery and assist the surgeons during the surgery.

Essential members of the staff include:

- A **Maintenance Mechanic** to ensure maintenance of the air-conditioners, generators and sterilizers,
- A **Computer Operator** to computerise Patients' records;
- A Cook to provide meals for the train staff, Doctors and visitors. His job also includes the purchase of provisions and the maintenance of kitchen expense accounts.
- A **Driver** for the vehicle attached to the LIFELINE EXPRESS.

Each of the staff responsibilities translates into scores of tasks at the project site, with the result that each staff member has become a multi-functionary.

It may be noticed that there is no medical functionary. This is because all medical functionaries required at the project site are volunteers. Detailed information on this is provided in the next chapter.



## CHAPTER 3

#### **PRE- PROJECT PREPARATIONS**

When a project is conducted at a location, it is the culmination of weeks of effort. The pre-project preparations are at two levels: before entering the site, and at the site.

This chapter describes the initial preparations before the preparatory team reaches the project site.

#### I. TERMS OF CONTRACT BETWEEN IMPACT INDIA AND COLLABORATOR

At the very outset, the senior Impact India personnel meet the senior management of the potential Collaborator – the initial approach may be from either side. At the first meeting an overview about Impact India, its LIFELINE EXPRESS and the role of a Collaborator are explained. The Collaborator/Sponsor's decision depends on the **three As**.

- 1. Appropriateness: Is there a need?
- 2. Access: Are a Railway siding, bus and rail links available?
- 3. Affordability: Are funds available to sponsor a project?

If the management agrees to be a Collaborator, a formal letter of contract is given to the Collaborator by Impact India. **(See Appendix II)**. This letter lists in detail the respective areas of responsibilities to be shared between Impact India and the Collaborator.

#### Details of action required to be taken

- 1. **Selection of a Railway Station:** with approval from the Divisional Railway Manager (DRM).
  - a. Preferably on a Platform (Goods Platform) for five coaches of approximate length 110 metres.
  - b. Water facility: (even tankers will work) consumption approximately 5000 liters per day.
  - c. Electricity 150KW.

#### 2. Approval of District Collector to conduct the Project.



#### 3. Support required from District Administration

- a. Accelerated publicity through Public Health Centres (PHCs) and through word of mouth, Television/ Handbills/ Posters/ Banners.
- b. Survey Lists and details of disabilities from the Collector's office
- c. Screening specialist doctors for screening at PHC level on specified dates as notified.
- d. Mobilisation of patients through Government machinery.

#### 4. Type and average number of Surgeries conducted:

- a. Corrective Orthopaedic Surgeries 15-18 per day
- b. Cataract (Intra Ocular Lens implant) 50-60 per day in OT 1 &

		30-40 per day in OT 2
С.	Hearing	15-18 per day

- d. Cleft Lip 15-18 per day
- 5. a. The Collector may assist in getting surgeons of the above specialties from the State (mainly Medical Colleges): four Surgeons and three Anaesthetists for Orthopaedic and Cleft Lip surgeries on a daily basis, and minimum one Anaesthetist for sight and hearing surgeries
  - b. The State Medical Authorities may help in making available doctors, staff, nurses, para-medical staff for pre-operative and post-operative cases in Patients wards and also for the Operation Theatres on IMPACT INDIA-LIFELINE EXPRESS. The presence of a Paediatrician (Child specialist) for examination of children is recommended.
  - c. The following paramedics are also required:
    - i. One Prosthetist, one Orthotist and one Physiotherapist for the duration of Orthopaedic surgeries.
    - ii. Two Audiologists for the duration of Hearing surgeries.
    - iii. Two or Three Ophthalmic Assistants (Optometrists) for the duration of Cataract surgeries.
  - d. Operation Theatre (OT) Seven OT nurses + two sweepers + one ward boy.
  - e. Post and Pre-operative area Two Medical Officers 24 hours + Four Ward nurses for 24 hours.
  - f. Eight Volunteers + interns



- 6. Telephone connection (Temporary) with S.T.D. facility
- 7. Laundryman (Dhobi) for washing staff and OT linen.
- 8. Medicines' list will be provided.
- 9. Aids & appliances for patients (Callipers, wheel chairs, crutches, hearing aids etc.)
- 10. Accommodation, food and transportation for outstation doctors and any other staff. Travel fares of doctors from home to project area and back.
- 11. Food for all staff working on the LLE.
- 12. Provision of two ambulances.
- 13. Food and lodging of patients (should cater for approximately 300 at any one time)
- 14. Documentation of patients' records (formats given in this manual)
- 15. Provision for filling of Nitrous and Oxygen gas cylinders used in the OT
- 16. Provision for filling of cooking gas cylinders.

Representatives of the Collaborator are required to be present at the initial meeting since they will have to participate in all the pre-project activities and throughout the duration of the project. The Collaborator is also expected to ensure the follow-up, of the Patients operated, upto one year after the project. Impact India provides a fully equipped and staffed Hospital train. The partner organises the project with support from Impact India.

#### II FORMATION OF A TEAM AT COLLABORATOR/SPONSOR'S LEVEL

At this point, the Collaborator may find it useful to set up a team from amongst its own personnel. Usually, Collaborators prefer to involve the Public Relations Department and the Welfare Officer (if any) with an 'overall-in-charge' who is usually a General Manager / Senior Manager.

It would be useful for the Collaborator to assign a minimum of two persons to assist the person who is in overall charge of the project for the day-to-day activities. Duties can be divided, functions can be interchanged and continuity ensured in case one is absent. Normally, one person from the corporate Collaborator's head office, and one from the regional office closest to the project site, is delegated. These two comprise the "permanent" team till the end of the project and are usually Managers or Senior Executives. (It is useful to have the same senior personnel in the team throughout to avoid confusion and facilitate quick decision-making). From time to time, the twomember team is supported by others from the corporate Collaborator's staff for publicity, promotion, etc.



The basic team must also comprise the Collaborator's National Medical Coordinator. He will be in charge of:

- Arranging or organising as well as briefing voluntary Doctors.
- Coordinating voluntary Doctors.
- Facilitating all the medical aspects of the project.

The composition of the team is left entirely to the Collaborator, in consultation with the Chief Executive, IMPACT INDIA-LIFELINE EXPRESS.

#### III SELECTION OF VENUE

During the initial discussions, the venue of the project is discussed and finalised by the Collaborator. The site is usually a rural setting of the Collaborator's choice. Normally, once the region is decided upon, the actual location is selected keeping in mind the following:

- Accessibility by road for the beneficiaries.
- A railway siding to park IMPACT INDIA-LIFELINE EXPRESS (Broad gauge railway track)
- Accessibility to local Primary Health Centres.
- Proximity to some schools, playground or Railway sheds to convert into wards, calliper workshop, etc.
- Availability of a Collaborator's Doctor near the project site.

This may mean short-listing more than one potential location, after a field visit by the Collaborator and Impact India's representatives.

#### IV PLANNING

Planning would involve two aspects:

- 1) Project Schedule (Macro planning)
- 2) *Taluka/Tehsil* (Block) Schedule (Micro planning)

#### 1. Preparation of Schedules

a) Selection of Blocks to be covered: Generally, the surrounding Blocks are targeted for publicity and scheduling of the Patients' visits.

The selection of the number of Blocks to be covered by the project is done by the Collaborator, bearing in mind that an overwhelming response is usually generated by intense advance publicity. This results in a large number of Patients coming from beyond the selected Blocks.

- b) The PHCs / Cottage Hospitals, Anganwadis / play schools and other Non Government Organisations in the area are identified.
- c) An estimate of the population in the area and the expected number of disabled persons in the four categories is made.

#### 2. Overall schedule and Block schedule

These schedules are announced to the local authorities before the project. (See details in the next chapter). The Project Schedule and the Block Schedule are extremely important and widely distributed to local authorities and is initiated at least 15 days before the date of inauguration of the project. All Posters, Banners and Handbills should be included the Block Schedule.

#### Project Schedule (Guidelines)

PREPARATION OF SITE	TWO WEEKS BEFORE INAUGURATION (D – 14) 14 days before date of inauguration
ARRIVAL OF TRAIN AT SITE	ONE WEEK BEFORE INAUGURATION (D – 7) 7 days before inauguration
INAUGURATION OF PROJECT	DATE (D)
SCREENING OF CLEFT LIP CASES	(D to D+5) 5 days after inauguration
SCREENING OF HEARING CASES	(D to D+7) 7 days after inauguration
SURGERY OF CLEFT LIPS	(D+1 to D+6)
SURGERY OF HEARING CASES	(D+1 to D+8)
SCREENING ORTHOPAEDIC CASES	(D+7 to D+10)
SURGERY ORTHOPAEDIC CASES	(D+8 to D+11)
SCREENING OPHTHALMIC (EYE)	(D+12 TO D+19)
SURGERY OPHTHALMIC CASES	(D+13 to D+20)
DEPARTURE OF THE TRAIN	DATE (D+21)



#### V PREPARATION OF BUDGET

The Collaborator needs to plan a budget, for which broad estimates are provided by IMPACT India. The major heads of expenditure for the Collaborator would be:

#### i. Accommodation of Patients:

This includes tents for

- Wards
- Toilets

Or buildings (if available), with furniture for Out-Patients, beds/mattresses for patients.

#### ii. Food

Food arrangements for Patients, guardians, volunteers and Para-medical staff need to be arranged. Generally, a local caterer is given the contract. It must be remembered that a number of possibilities are to be considered, such as:

- A varying number of people attend the project.
- A set menu needs to be indicated
- Various arrangements like *shamiana* (tent), water, portable toilets, and electricity etc. have to be finalised.

As a guideline for preparing the budget and entering into a contract for food, the terms and conditions of a sample contract with a caterer for the project at X Y Z station:- (Appendix III)

#### iii. Water

About 5,000 litres per day is required. This can be arranged with the assistance of the railway authorities in advance, failing which alternate arrangements are to be made.

#### iv. Electricity

This can also be arranged with the railway authorities. It is possible that the selected Railway Station does not have adequate power supply. In such cases, power needs to be drawn from the civil suppliers. The generators on the train are used only as a back up.

#### v. **Diesel for generators**

About 200 litres, is initially required; thereafter, as and when the need demands. The diesel consumption of a generator set is approximately 40 litres per hour.

#### vi. Aids and medicines

Aids include

- Spectacles (dark glasses) for operated cases to be arranged.
- Hearing aids, which are arranged and procured by the Collaborator.



 Ready-made metallic callipers are arranged through renowned institutions. These are purchased from private suppliers by the Collaborator.

The quantity of all aids required is determined by the turnover of Patients at the Health Centre. In order to avail of Government aid for callipers, a form needs to be completed and sent to the Artificial Limbs Manufacturing Corporation of India by the Collaborator. For this, an Income Certificate is required.

As far as medicines are concerned, Impact India has prepared a list, based on its experience in past projects. This can be modified according to the opinion of the consulting Doctors at the particular project. The Collaborator can either buy the medicines or pay for them. It is important to provide for adequate funds for food, aids and medicines as these directly affect the beneficiaries' perception of the quality of the project and the resultant goodwill and reputation.

#### vii. Transportation

At least three vehicles with drivers and fuel are essential during the period of the project for transportation of Doctors, Interns, Para-medical volunteers and Collaborator's staff, etc. An additional two ambulances are required for Patients if the ward is located away from IMPACT INDIA-LIFELINE EXPRESS. Additional vehicles and drivers will be required during the publicity stage.

#### viii. Publicity and Communications

Patients' data forms and publicity materials like hoardings, banners etc. have to be prepared. If preferred, special jingles and cinema slides may be composed and recorded for playing during mobile mass publicity campaigns. (See details later in this chapter). In addition to loudspeakers, which must be arranged for the publicity campaign, a public address system for the project is useful.

#### ix. Accommodation

Accommodation should be arranged for visiting media, Doctors, Para-medical staff, visiting Medical Interns from abroad and Visitors (from Collaborator's and Impact India's head office).

This is inclusive of local transport, food and modest lodgings for numbers, ranging from 20 to 50 people at a time. The lodgings should be near the project site. (Details of the number of Doctors and other medical staff required are in the next chapter). Volunteers to help with Registration etc. are recruited locally.

#### x. Administration

Facilities for Telecommunications and correspondence besides laundry facilities, sweepers, etc. have to be organised.



#### xi. Miscellaneous

It must be remembered that the cost of publicity depends on the Collaborator's own decisions. The costs of preparing the site and accommodation for all (except patients and guardians) are relative to availability of local facilities. Transport is also a relative cost. It should be noted that IMPACT India must plan its own budget as it bears an equal expenditure for each project.

The expenditure by IMPACT India is as below:

- Salaries of IMPACT INDIA-LIFELINE EXPRESS staff.
- Food and welfare of IMPACT INDIA-LIFELINE EXPRESS staff.
- Travel of staff.
- Surgical equipment and instruments, linen and theatre wear for Operation Theatres.
- Repairs and maintenance.
  - 1) Vehicles
  - 2) Generator sets.
  - 3) Equipments
- Maintenance of coaches: Payment to Railways by IMPACT India.
- Insurance.
- Administration.

#### VI PUBLICITY AND COMMUNICATIONS MATERIAL:

Impact India will provide the designs for posters and banners for the purpose of publicising the project. All references to LIFELINE EXPRESS will be as "IMPACT INDIA-LIFELINE EXPRESS". The name "LIFELINE EXPRESS" will not be coupled with any other name. It is hereby understood that LIFELINE EXPRESS is a project of Impact India Foundation.

The Collaborator prepares the following prior to the commencement of the project.

#### Publicity material:

This includes separate **banners** for inauguration and for publicity; **posters** giving key information about the project; dates on which Patients of different *talukas* (Blocks) must report to the train; and **handbills** similar in text and layout to the posters. **Flags** giving such information may also be prepared. The reverse side of the handbill may be used to print information about the Collaborator. Except for the banners at the site, all banners and handbills are in the local language. **(Appendix IV)**.

#### MANUAL ON IMPACT INDIA-LIFELINE EXPRESS



Since public announcements are made on the loudspeakers, the Collaborator arranges for about five sets of publicity teams, each with a vehicle (jeeps are ideal for rural areas), a loudspeaker, and at least two persons to make announcements, address meetings and distribute handbills. If preferred by the Collaborator, jingles may be composed and recorded for this purpose. Needless to add, this activity must be included in the budget.



(A sample of a Publicity Banner)

**Rubber Stamp:** A small stamp to register names / logos of Collaborator and IMPACT INDIA-LIFELINE EXPRESS could be used on all documents.

**Jingles,** specially composed and recorded for publicity, and **Cinema Slides,** for screening in rural and semi-urban theatres, giving relevant information could be distributed to local cinema theatres to be shown with other advertisements before the main movie, are two additional sources for publicity. These must be budgeted for in the publicity and communication package.



### CHAPTER 4

# PRE-PROJECT PREPARATIONS: LOCAL LEVEL AND AT SITE

The second level of preparation for IMPACT INDIA-LIFELINE EXPRESS project is at the local level and at the train site. It must be emphasised that preparations are related to facilities available, which may vary at different locations. The major areas of preparation are presented as for a typical medical project. The preparations at each level need not necessarily be carried out in the order listed. More than one preparatory activity may be launched simultaneously.

#### 1. RAILWAYS

There is a special relationship between IMPACT INDIA-LIFELINE EXPRESS and the Indian Railways. When the idea of LIFELINE EXPRESS as a Hospital train was conceptualised by Impact India, the Ministry of Railways agreed whole-heartedly to participate in the project and a Memorandum of Understanding between Impact India Foundation and the Ministry of Railways, Government of India, was signed. The latest MOU between Indian Railways and Impact India Foundation is attached as **(Appendix V)**. The partnership with Indian Railways is vital for the smooth functioning of this unique hospital train. A briefing of all General Managers of the Railways was carried out during the inception of the project. For a project at any station, the system works as follows:

- The General Manager of the Zonal Railways is given the venue and dates of the project at the district level. He informs:
  - i. The Divisional Railway Manager (DRM) who informs:
  - ii. The Head of the Subdivision.
- The local Station Master's support is essential as the entire railway staff in the area is involved.
- The DRM is requested to instruct the local Station Masters to permit:
  - i. Movement of the Hospital train.
  - ii. Parking of the Hospital train at the required siding for a specified period.
- iii. Provision of water (about 5000 litres per day) which is paid for by the Collaborator. If the Railways are not able to provide water, the Collaborator has to arrange for it from other local sources.
- iv. Provision of electricity, which is paid for by the Collaborator. If not available from Railways it can be obtained from the State Electricity Board or an alternate source. Electricity is also required for the various infrastructure and buildings at project site.



- v. Sanitation: The Collaborator has to coordinate for provision of:
  - a) Drainage facilities for IMPACT INDIA-LIFELINE EXPRESS toilets into septic tanks.
  - b) Drainage facilities for ten, temporary toilets to be constructed near the coaches and near the General Wards for the Patients use.
  - c) One toilet for the staff.
  - d) Drainage facilities for the catering unit.
- vi. Assistance of railway communication system for liaison purposes and other communications through local sources.
- vii. Assistance of railway maintenance set up for technical problems, if any, e.g. electrician and fitters for technical problems.
- viii. Permission for preparation of the site. The project is held in the vicinity of a railway siding, as far as possible. A survey of local facilities is generally made before the venue is finalised. Depending on each individual situation, required permissions from the local Railway authorities could include:
  - a) Use of covered/open space and erection of tents.
  - b) Use of platform adjoining the Hospital train, construction of temporary / permanent platform / ramp, if not available.
  - c) Cleaning of, sometimes even painting, the surroundings.
  - d) Display of publicity material.
  - e) Use of Parking space for Collaborators and Impact India's vehicles.

Generally, permission is given if sought through the proper channels.

Of course, like any other interaction, it is essential to build a good rapport, with the local Station Master. All these arrangements have to be made by the Collaborator's team with Impact India's guidance.

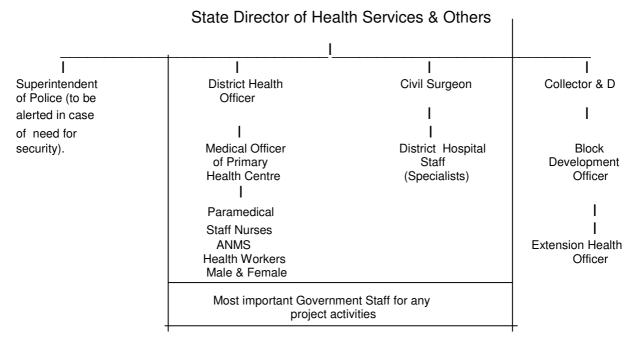
# II. COOPERATION FROM LOCAL GOVERNMENT OFFICIALS AND VOLUNTARY ORGANISATIONS

When Impact India was established in 1984, a Co-ordination Committee consisting of all major Ministries was set up. Hence, Impact India and its LIFELINE EXPRESS are well known at the Government levels. At the local level, a meeting is held with the local Government and voluntary organisations to obtain their support. A local level beginning at the District Collector's level can be initiated through the State Directorate of Health Services. A letter is issued to



the Collector from the State Health Directorate with a request to contact senior Government officials concerned with health services and administration. The help of the State Government Medical Officer, who works under the District Magistrate and Collector is very essential, therefore, the cooperation of District Collector is vital. It is important to note the hierarchy and the branches of Government to be dealt with. It must always be remembered that the initial screening of the Patients before the project and the follow up after the project are crucial activities which can either make or mar the success of the project, and are conducted wholly by the Government Health infrastructure and officials. Being sensitive and responsive to local Government Officials is important.

Apart from these, the other important group to be contacted is the main local voluntary organization like the Rotary or the Lions Club. It should be noted that local social organisations generally arrange for Doctors and Interns on a voluntary basis for the entire duration of the project.



GOVERNMENT OFFICIALS TO BE CONTACTED FOR EACH PROJECT:

They in turn, may contact local dignitaries who may arrange for volunteers. For example, the Principal of the College may be invited to encourage the students to become volunteers for the project as part of their National Social Service scheme duties. Again, it is important to be sensitive and responsive to local dignitaries to enlist their best co-operation.

#### MANUAL ON IMPACT INDIA-LIFELINE EXPRESS



- The venue and location of meetings to be decided by mutual convenience.
- Contacts to be made to organise the meeting by the Collaborator, in consultation with Impact India.
- Meetings to be jointly addressed by:
  - I. Representative of the Collaborator.
  - II. Impact India staff: Chief Executive, LIFELINE EXPRESS

Agenda of meeting:

- I. Introduction of IMPACT INDIA-LIFELINE EXPRESS.
- II. Introduction of the Collaborator.
- III. Short description of project
- IV. Announcement of Project Schedule and Block Schedule.
- Decisions taken at the meeting:
  - i. Screening of the Patients, procedure and schedule:
    - Initial screening of Patients before sending them to the train is done through the Government machinery. The procedure is explained and a schedule is set up with the District Health Officer, to meet and brief the Primary Health Centre Doctors who will assist specialised surgeons to conduct the screening. (Details of the screenings are in the next Chapter).
  - ii. Arrangements for volunteer Doctor teams for the project:

Normally, Doctors are arranged through a social organization. The Doctors may be Government / private practitioners from the local area. A Leader / Medical Coordinator is organised for each of the four specialties i.e. Orthopaedic, Plastic Surgery, Sight and (ENT) Ear, Nose, Throat (usually 10 days, for each handicap). He generally organises the teams in shifts lasting over 3-4 days. The team for one shift would ideally comprise:

- Three senior Surgeons.
- Two Surgeons
- Two Anaesthetists
- Six Nurses: Four for the day and two for the night.
- Six ward boys: Four for the day and two for the night.
- One "dresser".

Most Doctors bring along their own Anaesthetists. The briefing of these three Leaders/ Medical Coordinators on manpower requirements is to enable them to organise the teams. Normally, only the Medical Coordinator is briefed about the medical details, and he in turn apprises his team. (The medical details briefing is provided in the next chapter).

iii. Arrangements of Interns / Post-Graduate students: Normally, about 10 interns / Post-Graduate students are required at one time, two each at the indoor ward, OTs, Out Patient Department (OPD) and post operative/recovery ward. Two are required for night duty. These are



generally sourced with the help of Medical Coordinators from local medical college(s) for which written permission is sought from the Joint Secretary, State Department of Health and addressed to the Dean or directly from the Dean(s) of the medical college(s). This is arranged by the Collaborator.

iv. Arrangement for volunteers: Volunteers for various responsibilities are key members of the project and are needed in large numbers at site. (The duties of volunteers and the briefing given to them are explained in the next chapter). At any given time, about 20 volunteers should arrange teams to volunteer in shifts from their own group. Alternatively, volunteers can be arranged by the Collaborator from amongst local college students through their college Principal who can be invited to the meeting.

#### **III PREPARATION OF SITE**

As the train site has to be prepared before hand, it would involve a number of activities, depending on the facilities already available at the Railway station near the project site.

- Cleaning, levelling of land and filling of surrounding areas where the train is parked. A coat of paint on the siding premises may also be required. Normally the Collaborator organises a Contractor for this purpose.
- Planning and organising the following working areas near the train. This requires tents to be erected if adequate railway or other suitable public buildings are not available. If such buildings are available, then permission for the use of the buildings can be requested by the Collaborator.

Placards indicating the areas identified below should be displayed:

- i) **Enquiry booths:** These should be accessible close to the registration area. The booth is equipped with a long table and three chairs for volunteers.
- ii) **Registration and Waiting space:** An area of about 20 feet by 10 feet with floor covering, if possible, located in a tent would suffice. It should have a long table and three to four chairs for volunteers handling registrations.



Patients waiting for their turn at a camp



- iii) **Out Patients Department (OPD) and examination area:** An area of about 30 feet by 20 feet with floor covering in a tent is adequate. It should have the following:-
  - Around 4000 forms and cards which should be available at all times.
  - A sufficient quantity of writing stationery.
  - Four volunteers for registration. In addition, the Collaborator may also provide for a minimum of 20 volunteers and social workers.
  - Two tables and four chairs for the volunteers.
  - Two volunteers, each at a minimum of two places, earmarked for the examination of Patients in the OPD.

The examining area for Patients should be equipped with:

- Cots according to the number of Doctors.
- Two bowls for fresh water, antiseptics and other liquids.
- One side-table along with each coach.
- Chairs one each for Doctors.

The examining area for surgeons requires:

- One table
- One chair
- One Blood Pressure (BP) apparatus
- One Stethoscope
- Two Bowls for antiseptic solutions and fresh water.
- One Towel
- Writing pads
- Two Ballpoint pens/pencils

The Sight OPD and Hearing OPD require the following:

# Sight OPD

- Two Extension wires
- Two Ophthalmoscopes
- Four Headlights
- Two Vision Charts
- One Anaesthetist during surgeries as stand by
- One Nurse
- A Refraction Room with a technician and eye testing equipment

#### Hearing OPD

- Two Otoscopes
- Three Headlights



- Two Extension wires
- A place for Audiologists. (It is better to have two Audiologists)
- Two volunteers to assist the Audiologists.
- Ballpoint pens/pencils
- Writing pads.

Separate queues for men and women at the OPD area are maintained by the volunteers who will also escort the Patients for further procedures after examination. One or two Interns at this site should remain to guide, reassure and provide information to Patients before they depart

- iv) **Medicine counter:** A cupboard with a lock for medicines stored inside, a table and one representative of the Collaborator to dispense medicines, are required. The counter is located close to the General Ward.
- v) **Discharge area:** It should be near the medicine counter where the Patient is examined by Doctors and the discharge-form filled up. This area, which is also located in the General Ward, should have two tables and chairs.
- vi) **Post operative ward:** This is the largest area, which should be able to accommodate 200 Patients and guardians at any time, where Patients have to stay after operation. The requirements here would include: -
  - Two tables and four electric plugs.

It is preferable to locate the wards in existing buildings since they are normally equipped with electricity and all necessary plug points. The ward should be divided into rooms with floor mats. Patients are generally asked to bring their own bedding or mattresses. However, straw mats may be provided.

Additional accommodation can be provided in case of need by erecting tents. Pedestal fans should be provided except during winter.

- vii) Calliper Workshop: This is the area where callipers are prepared. It needs.
  - A tent or a room divided into two parts for the removal of plasters and the fitting of Callipers.
  - Two Tables (One working table of size 8" x 4" and one table for taking the measurement for making callipers)
  - Two chairs
  - . Long tables for Patients to sit / lie on while the plaster is removed and the callipers are fitted.
- viii) **Catering Unit:** A large *shamiana* or built-in accommodation for preparing and serving food, with a water connection, drums to hold water, seating arrangement to eat (maybe tables and chairs) and drainage facilities.



ix) **Sanitation:** Sanitation facilities should include adequate drainage and toilet facilities. (See Appendix VI).

#### x) **Drinking Water**:

#### xi) **Electrification:**

- All tents can be electrified with the help of a Contractor.
- Electrification is essential in all working areas and surroundings.
- All the arrangements are to be made by the Collaborator's team.

#### IV TRANSPORT

During the programme, two/three vehicles with drivers are needed from the Collaborator's side: one bus or van for transporting large numbers of people like batches of Doctors and Interns, along with one light vehicle, e.g. a jeep, to be constantly available at the project site.

(A requirement of vehicles for project publicity in the surrounding areas are discussed in the next chapter).

Two ambulances, each with a driver, can be arranged to transport operated Patients if the post-operative ward is far away from the surgical units of IMPACT INDIA-LIFELINE EXPRESS.

#### V. AUDIO SYSTEM

A Public address system is invaluable at the site, (apart from its utility during the inauguration) and should be arranged by the Collaborator.

# VI. TRAVEL AND LIVING ARRANGEMENTS FOR MEDICAL STAFF, VISITORS, MEDIA AND VOLUNTEERS

Lodging and food, for a variety of people, must be arranged by the Collaborator. Accommodation on a modest scale to be arranged for:

- Doctors / Nurses / Interns / Ward boys.
- Visitors from the Collaborator and Impact India's Head Office.
- Media.

A company guest house / rented and furnished rooms with baths are to be arranged.



The total number of such people at site could range from 20 to 50. If accommodation is arranged near the project site it would save on additional vehicles needed for transporting people to and from the site.

Long distance travel is to be arranged well in advance. It helps if bookings are delegated to one person from the Collaborator's team. Travel and living arrangements are to be provided by the Collaborator.

# VII ACCOMMODATION AND FOOD FOR PATIENTS:

#### PRE PREPARATION AT LOCAL AND PROGRAMME LEVELS

<u>Please note:</u> Preparations are related to local conditions. Activities need not follow the same order as given below.

i) Railways

Permission for:

- Movement of IMPACT INDIA-LIFELINE EXPRESS to station
- Parking of the Hospital train
- Provision of water
- Provision of electricity
- Sanitation
- Use of Railway's communication system for liaison with the Railways
- Use of Railway's maintenance set up
- Preparation of project site.

To be arranged by Collaborator team in consultation with Chief Executive of IMPACT INDIA'S LIFELINE EXPRESS

# ii) Cooperation from local Government, Voluntary Organisations, at a high level meeting

- Venue and location of meeting
- Contacts to set up meeting
- Meeting to be jointly addressed
- Agenda of meeting
- Decisions to be taken at the meeting
- Screening of Patients: procedure and schedule including setting up meetings with PHC Doctors
- Finalising the Taluka Schedule
- Arranging Doctors who volunteer their services
- Arranging Interns
- Arranging volunteers.

All these to be arranged by the Collaborator in consultation with the Chief Executive of IMPACT INDIA-LIFELINE EXPRESS.



#### iii) Preparation for project site:

- Cleaning, levelling and painting if necessary, of surrounding areas.
- Planning and organising the following areas in nearby buildings or in tents:
  - i. Enquiry booth
  - ii. Registration and waiting space
  - iii. Out Patients Department (OPD)
  - iv. Medicine Counter
  - v. Discharge Area
  - vi. Post Operative Ward
  - vii. Calliper Workshop Area, if needed
  - viii. Catering Unit
  - ix. Toilets
  - x. Drinking Water
  - xi. Immunization booth
  - xii. Electrification

The cleaning, levelling, painting and setting up of tents can be done by a contractor, to be arranged by the Collaborator's team, in consultation with the Chief Executive of IMPACT INDIA-LIFELINE EXPRESS.

- Transport:
  - i. One bus and one light vehicle with drivers to be arranged by the Collaborator. (Separate vehicles are required for publicity).
  - ii. One vehicle and ambulance with a driver should be available.
- Sound System:

For use at site for publicity

- Travel (long distance and local), and living arrangements for medical staff, visitors and volunteers.
   The number of persons may range from 20 to 50. Modest lodgings to be arranged in hotel / company guesthouse / furnished rooms with bath, near the train site. To be arranged and paid for by Collaborator.
- Accommodation (in ward) and food (through contractor)

#### VIII CULTURAL PROGRAMME

May be arranged by the Collaborator two/three times at Post-operative ward for entertaining patients and their attendants. These could include instrumental or vocal musical entertainment programmes including *bhajans*, *kirtans*, etc.



# CHAPTER 5

#### A SAMPLE DIAGNOSTIC AND SURGICAL PROGRAMME FOR THE ORTHOPAEDIC, SIGHT AND HEARING DISABLED AND CLEFT LIP

Our project at XYZ station is scheduled for inauguration but the first phase of activities has already been completed before the inauguration.

Two major activities already completed simultaneously are – Project Publicity and Screening of Patients.

# I PUBLICITY AND PROMOTION

This is done at two levels:-

#### i. **Press coverage of the project:**

At the head offices of Impact India and the Collaborator for international and national coverage.

At the local level by arranging for regional press coverage.

# ii. The second level is a publicity campaign at the local level where the project is conducted.

To inform people about the project

To create a demand so that the public can avail of the services offered.

#### The media used for publicity are:-

- Print media (through newspaper coverage).
- Extensive announcements through loudspeakers (the messages are the same as the contents of the handbills). Jingles may also be used.
- Distribution of handbills in the local language.
- Display of banners, posters and flags (carrying the same message).
- Cable TV and Radio Broadcast.

While the Collaborator would have already prepared all materials before commencing the project, he could also plan for the use of jingles and cinema slides.

It should be emphasised that the level of publicity should be proportionate to the capabilities of the Collaborators of the project to meet the demand for medical services created by the publicity. Generally, there is an excellent response in terms of the number of referred Patients.

The number of Blocks to be covered should also be decided keeping this factor in mind.

The schedule of the publicity campaign is planned in advance. Generally, it is 20-30 days before the inauguration.

The arrangement of **publicity teams** by the Collaborator is essential. This would consist of at least five teams, each equipped with a vehicle and a driver, a public address system (loudspeaker), handbills, posters, banners, flags and any other material. There should be at least two persons, besides the driver, for each vehicle.

**Publicity** / **rural propaganda:** Since the Blocks to be covered are decided in advance, they are divided between five teams, depending on the geographical locations and population of the Blocks. Thus, for our projects at XYZ station, the teams could be divided.

#### DIVISION OF AREAS FOR PUBLICITY TEAMS

District A	Block 1	
	Block 2	Publicity Team I
	(Blocks next to eacl	h other and with small population)
District B	Block 3	Publicity Team II
District C	Block 4	Publicity Team III
	Block 5	Publicity Team IV
		Publicity Team V

(The distant and largest population Blocks)

It is essential to allot one team per Block. The division of areas to be covered for rural propaganda is dependent on the field conditions and availability of vehicles and manpower.

Each part of the allotted area is covered by a publicity team travelling in a vehicle.

#### Please note:

- Announcements are made in the local language at public gatherings like market days, festivals, schools, bus stations etc.
- Government Primary Health Centres are visited and Doctors and other staff are motivated to screen and refer Patients to IMPACT INDIA-LIFELINE EXPRESS.
- Handbills are distributed extensively.
- Wherever appropriate, posters, banners and flags are displayed.
- As a rule, the distant areas are covered first.

**Publicity through Government channels:** It must be remembered that since Government Health Officers are involved, they ensure that information is disseminated through official bulletins and even specially designed handbills, through their infrastructure, which includes health centres, schools, offices, training centres, etc.

**Publicity through voluntary and social organisations:** This works in a similar fashion, but here it may be more direct through verbal communication with small groups.

**Publicity through word of mouth:** The largest volume of publicity is through word of mouth. This happens when officials and others associated with the train's functioning, talk about it. More important, the rural grapevine works better than modern telecommunications and is so efficient that Patients come from as far away as other States.

**IMPACT INDIA-LIFELINE EXPRESS creates its own publicity**: The gaily-coloured train is the centre of local attraction and creates its own publicity. Organisers must be prepared to cope with different groups of local visitors wanting to know about the project and to see the train. They may be local Doctors, officials, families, organisations, schools or just residents of the area.

# II DESIGNATED SPOKESMEN

Normally, the two permanent members of the Collaborator's team along with the Chief Executive of IMPACT INDIA-LIFELINE EXPRESS are the spokespersons at site. Press and visitors may also be addressed by visiting IMPACT staff such as the Chairman, Chief Executive of IMPACT INDIA-LIFELINE EXPRESS. On no account should detailed briefing be handled by any other person, to avoid misinformation or disseminating of partial information. However, the media and visitors are free to meet and interview anyone at the site. This restriction is only to enable correct information to be disseminated.

#### III SCREENING OF PATIENTS AT LOCAL LEVEL (BEFORE PATIENTS COME TO THE HOSPITAL TRAIN)

It may be recalled that Senior Government Officers, namely, the District Health Officer and the Civil Surgeon, are contacted at an initial meeting and their cooperation is solicited for the screening of Patients.

The following steps are taken before screening:

#### i) Briefing Primary Health Centre Medical Officers

In rural India the Government has established for every 30,000 people, one Primary Health Centre (PHC) which has one or two Medical Officers (MO) who are qualified Doctors. Patients are asked to go to the nearest PHC where the MOs conduct the initial screening of Patients to identify eligible cases, which can be handled at project site. Prior to this, the District Health Officer briefs all the Medical Officers of the PHCs in the Blocks to be covered at a meeting. The Chief Executive of IMPACT INDIA-LIFELINE EXPRESS and/or the Medical Officer of the Collaborator, address the MOs if requested by the Collaborator.

The MOs of each PHC generally brief the health workers attached to the PHC. If desired, the Health Workers and Auxiliary Nurse Midwives (ANMs) can also be briefed by the organisers.

The contents of the briefing for PHC MOs are as follows:

Role of Primary Health Centre Doctors and Village Health Workers

To identify surgery cases for:

<u>Cataracts:</u> Patients should be healthy and capable of withstanding an operation.

- Conduct clinical examination
- Check for diabetes.
- Check for High Blood Pressure
- Check for other chronic ailments



(Assessing refraction by Auto Refractometer)

**Deafness:** of the middle ear sclerosis type only

- No running discharge from ears.
- No running discharge from noses.
- No tonsillar problems

Normally, deaf mutes from birth cannot be helped by an operation alone.

**Orthopaedic Deformities:** Children under 14 with gross deformities at the hip, knee and ankle or foot levels are suitable for surgery.

<u>Pre-operative preparation:</u> during the week before the project starts:

- Clinical examination for medical fitness.
- Complete blood count
- Blood and urine sugar for older Patients
- Injection Tetanus Toxoid 1/2ml is given to cases considered for surgery.

#### Cleft Lip Surgery

• <u>Pre-operative preparation:</u> is the same as for Orthopaedic cases.

**In all cases:** It is important to advise the Patients not to expect miracles. Otherwise all and sundry will crowd around the train with high expectations.

#### Broadly speaking:

**Orthopaedic:** Approximately 10% of all orthopaedic cases screened have been found suitable for surgery on the train with another 30% suitable for callipers alone. It is necessary that Health Centre Doctors should identify these 40% Patients rather than send all 100% to the train.

<u>Sight:</u> About 40% to 50% adults with visual disorders are suitable for cataract surgery.

**<u>Hearing</u>**: Only about 5% of those tested are found suitable for surgery with immediate restoration of hearing on the operation table.

Another 5% to 10% could be helped with hearing aids. Hearing aids are expensive and involve a certain level of intellectual ability to handle, service and use them regularly. Hearing aids are provided to those who will return to a productive vocation, occupation or education. **All Patients should not be promised hearing aids.** 

Briefing of MOs may require a number of sessions, at least one meeting per Block/District is essential. **Briefing of MOs must take place at least one month before the project.** Scheduling of these meetings is done through the District Health Officer by the Collaborator. Impact India staff involved at this stage is generally the Chief Executive of IMPACT INDIA-LIFELINE EXPRESS.

<u>Cleft Lip:</u> Cleft lip with or without soft cleft palate can be repaired on the LIFELINE EXPRESS.

CLEFT SURGERY ON LIFELINE EXPRESS HAS TRANSFORMED SARITA'S LIFE



**BEFORE SURGERY** 



AFTER SURGERY

Surgery for post Burn Contractures will be limited to minor contractures only, which may give relief to movements of the joints affected.

# ii) The Forms to be used for screening are distributed to Medical Officers.

These are:-

**Primary Assessment Forms:** To be completed by the Medical Officer at the Primary Health Centre. The assessment forms include Orthopaedic, Ophthalmic, Hearing deficiencies and Plastic Surgery. **(Appendix VII)** 

**Registration Form:** To be completed by the volunteers who are doing the work of registration of patients at the camp. **(Appendix VIII)** 

**Orthopaedic Assessment Form:** To be completed by the Surgeons to register eligible Orthopaedic cases (Appendix IX).

**Plastic Surgery Assessment Form:** To be completed by the Surgeons to register eligible Plastic Surgery cases. (Appendix IX)

Hearing Assessment Form: To be completed by the Surgeons to register eligible hearing disability Patients (Appendix IX)

**Ophthalmic Assessment Form:** To be completed by the Surgeons to register eligible Ophthalmic cases (**Appendix IX**).

All Registration Forms are handed over to the respective Patients.

iii) Each PHC is visited during the publicity campaign and MOs are rebriefed.

The Schedule of Surgeries must definitely be given to the Medical Officers to ensure that they record the right dates for Patients to report to the train.



iv) Levels of Screening: Having completed the preparatory steps, screening is then conducted. The two stages of screening (to be also clearly conveyed to DHO and MOs) are:-

**Stage A:** Patients go to the Primary Health Centre after obtaining information from: Publicity campaign, or are referred to the PHC by *Anganwadi* Workers, ANMs and other health workers of the PHC.

**Stage B:** After preliminary examination of the Patient, the MO fills the Primary Assessment form.

Those who are found to be eligible, based on the criteria given after briefing, are examined thoroughly by a Surgeon, (brought from the nearest city by the Collaborator) assisted by the PHC Para-medical staff and have the appropriate Primary Assessment Form completed by the MO. At this stage, the Patient undergoes pre-operative investigations. The Patient is given the Primary Assessment Form with details of the date on which to report to the train for final Screening and Surgery. This is done in order to avoid needless crowding at the site. The MO retains a copy of the Primary Assessment Form for his record.

#### IV BRIEFING OF MEDICAL COORDINATORS/LEADERS

At the initial meeting, contact is established with persons / organisations who will arrange for the Doctors. A Medical Coordinator / Leader for each type of specialised surgery is selected and should be available throughout its period. Generally, Medical Coordinators / Leaders are briefed at one or more meetings, and will, in turn, take care of the briefing of other members of the medical team i.e. Doctors, Interns / Nurses, ward boys, Post Graduates, medical students, etc., and also allot their allotment of duties. It is important to inform the participating medical team about the corporate Collaborator, Impact India and its LIFELINE EXPRESS. Certain medical guidelines have been developed for each speciality, which must be communicated to the Medical Coordinator.

**Guidelines for Medical Coordinators:** 

1) Orthopaedic: it is possible to use all three tables simultaneously in Operation Theatre 1 for Orthopaedic cases. Anaesthesia machines and all the required amenities are available.



The team should consist of:

Four Surgeons Three Anaesthetists Four Theatre Nurses Three Ward Boys Ten Interns One Lab Technician Three Fitters One barber to remove hair.

**Period of stay:** One Doctor should remain till all Patients have been discharged.

**Follow-up:** Three weeks after surgery all Patients should be attended to over a twoday period for the removal of plasters, sutures and for the fittings of callipers under the supervision of one or two Senior Consultants.

<u>The measurement and fitting of callipers</u> should commence from the first day itself and continue daily till all Patients have been fitted. <u>All selected for operation should</u> <u>be measured for callipers prior to surgery</u>. <u>The Collaborators provide Follow-up to</u> <u>Patients in need at nearby clinics / Hospitals</u>.



#### 2) ENT Surgery Team

- Three Senior Surgeons
- Three Assistants
- One Anaesthetist
- Four Theatre Nurses
- Three Ward boys
- One Audiologist
- One Lab. Technician
- One Barber to remove hair.

**Period of stay:** Each team should spend three full days at the project for maximum efficiency with at least one team staying for the remaining four of the ten - day project.

**Follow-up:** A week, after the last day of the project, should be set aside for followup of all operated cases for e.g. for the removal of sutures, and pack, if used.

Hearing Aids: To be given to deserving cases.

**Audiometry:** To commence from the first day of hearing surgeries.

**3)** <u>Cleft Lip:</u> Three surgeons with three assistants and three Anaesthetists, four Operation Theatre nurses, three ward boys and one laboratory assistant to stay for 4-5 days. An adequate amount of antibiotics is to be arranged, including Paediatric endo-tracheal tubes.

4) <u>Cataract Surgery:</u> It is possible to operate on all five operation tables simultaneously.

#### <u>Team:</u>

- Five Ophthalmic Surgeons
- Five Assistants
- Two Anaesthetists
- Five Theatre Nurses
- Three Ward boys
- One Lab. Technician





Before operation After operation A Cataract surgery patient on IMPACT INDIA'S LIFELINE EXPRESS



**<u>Period of stay:</u>** Each team should stay for three full days with one team staying for all days in a period of ten days. Two Doctors should remain for two days till all Patients have been discharged.

**Spectacles** (black glasses) can be given at the time of discharge.

Intra-ocular lens implants is the method of choice in as many cases as possible.

<u>Medicines</u> are standardised to facilitate availability and uniformity. Antibiotics Antibiotic eye drops

**<u>Pre-operative preparation:</u>** (As directed by the Ophthalmologist) Local anaesthesia on train. 2% Liganocaine (with Marcaine supplement or Adrenaline).

**<u>Pre-operative treatment:</u>** Eye drops

# V. GUIDELINES FOR SEQUENCE OF THE HANDICAPS HANDLED

The sequence of handicaps handled is:

-	Cleft Lip (Plastic Surgery)	6 – 8 days (in OT 1)
•	Hearing Surgery	4 – 6 days (in OT 2)
•	Orthopaedic Surgery	4 – 6 days (in OT 1)
•	Cataract Surgery	6 – 8 days (in OT 1 & 2)

Cleft Lip and Hearing Surgeries will be held simultaneously.

Total Project duration - from 16 to 22 days.

Orthopaedic surgeries are normally conducted first. This is to allow enough time to carry out follow-up activities for orthopaedic Patients after surgery. The "rest" days are used for attending to pending cases when there are no fresh registrations. This is also the time for replenishing stock, checking arrangements, and giving a break to the full-time workers like the Collaborator's team, and IMPACT INDIA-LIFELINE EXPRESS staff.

# VI PLANNING OF THE PROGRAMME (WITH CHECKLISTS)

**PHASE ONE:** This is the period before the inauguration. It comprises the following sub-processes:

# 1. PUBLICITY AND PROMOTION

- Press coverage
- Publicity campaign
- Media used for publicity
- Schedule of publicity campaign
- Arrangement of publicity teams.
- Method of conducting rural propaganda
- Publicity through Government channel
- Publicity through voluntary and social organisations
- Publicity through word of mouth.



### 2. DESIGNATING SPOKESPERSONS

### 3. SCREENING OF PATIENTS AT LOCAL LEVEL

(Before Patients come to site)

- Briefing Primary Health Centre (PHC), Medical Officers (MOs).
- Primary Assessment Forms to be given to Medical Officers.
- Each PHC revisited during publicity.
- Levels of screening.
  - i. Health Workers level.
  - ii. Medical Officers level
  - iii. Rural Hospital's Specialists level (optional)

#### 4. BRIEFING OF MEDICAL COORDINATORS / LEADERS.

5. SEQUENCE OF HANDICAPS HANDLED.

#### 6. PROCESS OF WORK FOR INVESTIGATIONS.

**PHASE TWO:** This period commences following the inauguration of the Project. The inauguration is generally a simple ceremony in the presence of officials from the Collaborator's head office, Impact India's head office and local dignitaries. It is recommended that the Government officials listed in the Chart in Chapter 4, and voluntary organisations, should be invited. Normally a Chief Guest is identified to inaugurate the project. Broadly speaking this phase involves the following steps:

#### 1. Involvement of Volunteers

- i. Briefing of volunteers
- ii. Duties of volunteers
- 2. Functioning of the Programme
- 3. Ten Typical Daily Tasks at Project for Organisers
- 4. Record Keeping

#### 1. INVOLVEMENT OF VOLUNTEERS

Volunteers are needed in large numbers, if the project is to run smoothly. At least ten are required at a time.

# i. Briefing of volunteers (non-medical).

(by IMPACT India & Collaborator's representatives).

The following points may be covered:

- About the corporate Collaborator, Impact India and its LIFELINE EXPRESS
- Activities related to the project.
- The Schedule of Surgeries
- Criteria of Patient's eligibility.



- Counselling skills and health education to respond to Patients' queries.
- Recording skills for various kinds of documentation.
- Importance of volunteers.

### ii. Duties of volunteers (non-medical)

The following may be the broad duties of volunteers.

- Crowd control
- Guiding and escorting Patients
- Giving information to Patients
- Registration of Patients
- Assist medical team at OPD, Wards, Calliper Unit, etc.
- Pre-operative preparations (like cutting hair) and carrying / escorting after operation.
- Procuring stocks and medicines, if needed
- Look after accommodation and meals of Patients.
- Assist in smooth administration of the project.

Volunteers are arranged by the Collaborator and are briefed about work allotted daily by the Collaborator's team / Chief Executive of IMPACT INDIA-LIFELINE EXPRESS.

# 2. FUNCTIONING OF THE PROGRAMME

If the identification and treatment of an orthopaedic Patient, whom we shall call Ramu, is followed through, what do we observe?

Ramu hears of the project though pre-project publicity.

He has already been through the screening process and reached the train with the completed Primary Assessment Form **(Appendix VII)** on being referred by the Medical Officer of the PHC. Typically, the average distance he travels, and the expenditure that he incurs, is much lower than for his previous treatment, if any, at other centres. On an average, a Patient travels upto 45kms, and spends upto Rs.50/- to reach the train; whereas for treatment elsewhere, he travels an average distance of 85kms, and spends upto Rs.2,000/- on travel, fees, medicines, etc. This is the amount spent by Ramu alone; his escort / guardian spends more.

Surprisingly, if Ramu is asked for reasons for seeking treatment from IMPACT INDIA-LIFELINE EXPRESS, he cites free-of-cost treatment including facilities for operations and aids available. However, the major reasons quoted by about 80% of Patients, is that all who come to the Hospital train, expect to be given proper treatment as the train has all the facilities for providing advanced medical treatment. This is the major aim of IMPACT INDIA-LIFELINE EXPRESS – to reach those handicapped, who do not have access to such treatment. (All figures quoted are from an evaluation study of an earlier project at Bihar, conducted by Operations Research Group – ORG).

Typically, Ramu's guardian goes to the enquiry counter for directions, and is directed / escorted to the registration area. Here, he submits Ramu's details to the volunteers to complete the Registration Form **(Appendix VIII)** and the details are entered in the

register. Ramu's (specific disability) Assessment Form **(Appendix IX)** is attached to his Registration Form. Volunteers compile the Forms. Ramu is then directed to wait in the queue for males in the OPD. He is screened by the Doctors and is either accepted for further treatment or rejected.

If rejected, Ramu may be given:-

- Medicines if needed
- Referred to a nearby public / private hospital.
- Guidance and health education by a Doctor / Intern.
- If Ramu has travelled a long distance and cannot leave the same day, he is provided a place to sleep.
- Generally free food is given only if Patients are accepted, however if the Collaborator agrees, Patients may be offered at least a subsidised meal even if not accepted for treatment, provided they have arrived at the venue at night or from long distances and cannot return at once when rejected.

Ramu may be found suitable only for callipers, without a corrective operation, in which case, his measurements are taken and he has to return to have them fitted.

If Ramu is accepted for operation, he should complete the Admission Form for patients in need of surgery. (Appendix X). He is sent for pre-operative preparations like a haircut, etc. It must be remembered that his tests have already been done at the PHC level. If the necessary investigations have not been done at the PHC level then they should be done at site by the Laboratory Technicians. He is sent to the medicine counter for pre-operative medication and is offered medical guidance and counselling. He or his guardian will sign the Consent Form. (Appendix XI)

Ramu then waits outside the Hospital train's Operation Theatre (OT) and is taken to the pre-operative ward on IMPACT INDIA-LIFELINE EXPRESS before being sedated.

When Ramu's operation is scheduled, he is carried into the Operation Theatre. A senior surgeon along with a team operates on him after which he is carried back to the recovery ward adjoining the OT on the train. The Patient is next carried / transported to the Post-operative Ward outside the train which has a floor covering and mattresses, where his guardian attends to him. This will be his residence for the next five days. The stay period before discharge generally is given as under: Cleft Lips - 7 days, Cataract – 1 day, ENT – 5 days, Orthopaedic– 4 days.

Meanwhile, Ramu's guardian is given an entry pass and a meal card. He receives meals regularly at the catering unit. (Appendix XII) Toilets and drinking water are available.

Ramu is checked by Doctors and Nurses and given all medication, until found fit for discharge. A discharge card is partially completed by a Doctor based on information available to him and handed over to Ramu, with instructions to return for follow-up.



After follow-up (details later in this chapter), Ramu will be given:

- His completed discharge card. (Appendix XIII)
- Guidance and information.
- His plan, PHC/Hospital name for follow up.

A Feedback Form (**Appendix XIV**) is given to the Patient/Guardian. If asked whether satisfied with treatment, Ramu/his guardian will probably agree (as per evaluation study cited earlier). Simultaneously, the Surgeon who operated on Ramu is given a Questionnaire to record his experience on the hospital train. (**Appendix XV**)

While Ramu was being treated, around him, at least 100 Patients were simultaneously going through various stages of treatment.

The Impact staff involved at this stage is the Chief Executive of IMPACT INDIA-LIFELINE EXPRESS.

# 3. TYPICAL DAILY TASKS AT SITE FOR ORGANISERS

A number of activities are to be organised on a daily basis during Phase Two of the project. Some of the important functions are:

- Morning and Night rounds in Wards (by medical team).
- One Doctor required for night duty.
- Medication of Patients (by medical team).
- Daily cleaning of site and of the train (requiring at least four sweepers, paid for by the Collaborator).
- Laundry of OT linen (by two *dhobis* washermen paid by the Collaborator).
- Monitoring of pre-operative and post-operative care of Patients (by Collaborator's team).
- Briefing and allocation of duties to volunteers (by Collaborator's team).
- Stock checking and replenishing the stock of medicines, by the Chief Executive of the hospital train and his staff if medicine is supplied by Impact India, otherwise by the Collaborator.
- Liaising with Doctors and medical team (by the Chief Executive of the hospital train and the Collaborator's team).
- Meals for all doctors working in the Operation Theatre only (prepared and served on IMPACT INDIA-LIFELINE EXPRESS) during lunch time.
- Liaising with visitors including media (by the Chief Executive of the hospital train and the Collaborator's team).

#### 4. **RECORD KEEPING**

In such a complex field setting and dealing with numerous agencies, the keeping of records is imperative.

Ideally, there should be a brief weekly / bi-weekly report to both head offices (Collaborator and Impact India). A Representative of the Collaborator's team



and the Chief Executive of IMPACT INDIA-LIFELINE EXPRESS should jointly sign the report.

Other records to be maintained and persons responsible are:

#### **RECORD REGISTERS**

<u>S.NO</u>	. TYPE OF REGISTERS		TO BE MAINTAINED BY
1.	Out Patients Department	٦	Moude
2.	Wards	ſ	Wards
3.	Operations	ſ	Interne (Destars (Nistes)
4.	Anaesthetist	ſ	Interns / Doctors (Notes)
5.	Callipers		Orthotist
6.	Audiology/Audiogram		Audiologist & Volunteers
7.	Dark Glasses + Spectacles		Volunteers
8.	Hearing Aids		Audiologists
9.	Medicine Stock		Medicine In-charge deputed by Collaborator.
10.	Travel and Transport Accounts (	Local)	For own vehicles by Collaborator team and the Hospital train staff.
11.	Total cases in each category		Medical Coordinator / Chief Executive, of IMPACT INDIA- LIFELINE EXPRESS
12.	Follow-up cases to be given to Sponsor and PHC level Doctors		Medical Coordinator / Chief Executive, of IMPACT INDIA- LIFELINE EXPRESS
13.	Collaborator's expenditure		Actuals by Collaborator's team. Medical Coordinator, Chief Executive, of IMPACT INDIA- LIFELINE EXPRESS to keep rough check and suggest ways to reduce expenditure.
14.	LIFELINE EXPRESS expenditur	е	Chief Executive, of IMPACT INDIA- LIFELINE EXPRESS.



**PHASE THREE:** At this stage a follow-up of the four disabilities is conducted:

- i. During the project period at site, and
- ii. After the project period at pre-determined hospital / PHC.

#### 1. Follow-up at Site

#### **Orthopaedic**

Non-operative cases and those recommended for callipers after screening are sent to Orthotists to be measured for callipers. They need to make one follow-up visit; roughly after 20 days, to collect their callipers. For operative cases, they are called after three weeks or six weeks.

#### 2. Follow-Up after the Project

A list of all Patients in need of follow-up is prepared by the Collaborator who is required to ensure proper and complete follow up.

It is the responsibility of the Collaborator to provide follow-up service for about two years to Orthopaedic Patients.

Fixed dates and locations can be set where the Patient can receive care with regard to:

i.	Adjustment of Callipers	& Physiotheraphy (to be decided by Surgeon in
		collaboration with the Orthotist team.
ii.	Cataract	(6/8 weeks after surgery)
iii.	Hearing disabilities	(Stitch and Pack removal on 7 <sup>th</sup> day of surgery)
iv.	Cleft Lips	(Stitch removal on 7 <sup>th</sup> day of surgery)

**PHASE FOUR:** This is the winding up stage, after the project has officially come to a close. This stage involves the following:

1. DISTRIBUTING CERTIFICATES OF APPRECIATION TO VOLUNTARY DOCTORS AND VOLUNTEERS. A Special, ornamental certificate, printed on thick paper, designed and produced by Impact India, is presented to the Doctors who participate in the Programme, as a token of appreciation of their voluntary service.

In addition, Questionnaires are distributed to the Surgeons to obtain their feedback (Appendix XV).

# 2. COLLABORATORS

- Settle accounts with contractors, etc.
- Stock checking
- Information / Documentation exchanged with IMPACT INDIA-LIFELINE EXPRESS staff.



# 3. IMPACT INDIA

- Settle the Railway's bill at Railway Headquarters level, submit the statements for daily detention charges and usage of electricity and water, after collecting them locally.
- Settle the Railway's bills at local level for haulage charges.
- Inventory and restocking of IMPACT INDIA-LIFELINE EXPRESS.
- 4. FINAL MEETING BETWEEN COLLABORATOR'S TEAM AND IMPACT INDIA STAFF: A FAREWELL FUNCTION



# CONCLUSION

IMPACT INDIA-LIFELINE EXPRESS project is not just an event but a unique concept in combating preventable disability, virtually at the doorsteps of the Patients. It aims to reach out and change the lives of the disabled, not only by offering treatment at the project site, but also by involving various stakeholders such as the Government, voluntary agencies, voluntary medical and paramedical professionals, and above all, the corporate sector, in the fight against disability on an on-going basis. By far, the biggest gain to the disabled is the tremendous awareness and goodwill generated for their cause among ordinary people.

In the final analysis, IMPACT INDIA-LIFELINE EXPRESS serves as a link, and a catalyst, towards the creation of an overall atmosphere of care and concern for the underserved disabled.



# LIST OF APPENDIXES

<u>Sr. N</u>	lo.		Details:	Page:	Ref:
1.	Appendix I	-	Physical Layout of the Train	60-62	12
2.	Appendix II	-	Prototype of Contract Letter	63-65	22
3.	Appendix III	-	Sample Contract with Caterer	66-67	27
4.	Appendix IV	-	Publicity Handbill	68	29
5.	Appendix V	-	Latest MOU between Indian Railways and Impact India Foundation	69-73	31
6.	Appendix VI	-	Sanitary Arrangements	74-75	38
7.	Appendix VII	-	Primary Assessment Form	76	53
8.	Appendix VIII	-	Registration Form	77	54
9.	Appendix IX	-	Orthopaedic Assessment Form	78	54
10.	Appendix IX	-	Plastic Surgery Assessment Form	79	54
11.	Appendix IX	-	Hearing Assessment Form/Audiogram	80-81	54
12.	Appendix IX	-	Ophthalmic Assessment Form	82	54
13.	Appendix X	-	Admission Form	83-84	54
14.	Appendix XI	-	Consent Form	85	54
15.	Appendix XII	-	Meal Card	86	54
16.	Appendix XIII	-	Discharge Card	87	55
17.	Appendix XIV	-	Patient's/Guardian's Feedback Form	88	55
18.	Appendix XV	-	Surgeons' Questionnaire	89	55

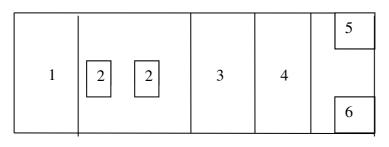


# **APPENDIX I**

# PHYSICAL LAYOUT OF THE TRAIN

#### 1. SERVICE COACH:

Coach No. 07891



- 1. Guard Room
- 2. Gen Set
- 3. Staff Accommodation
- 4. Kitchen
- 5. Toilet
- 6. Liquid Petroleum Gas (LPG) Storage
- 2. ADMINISTRATIVE COACH:

Coach No. 07888

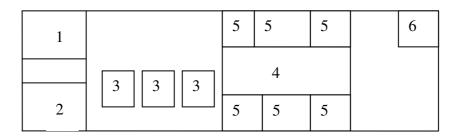
2					
1	3	4	5	6	7

- 1. Electricity & AC Panel
- 2. Toilet
- Utility Room/ Lounge
   Dress Change Room
- 5. Office
- 6. Store
- Sterilisation Room 7.



#### 3. OPERATION THEATRE 1:

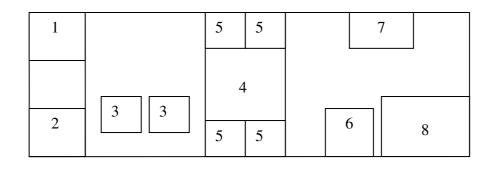
Coach No. 07889



- 1. Surgeon's washing area
- 4. Recovery Room 5. Lie-in Berths
- 2. Electricity & AC Panel
- 3. Operation Theatre (OT) Tables 6. O2 & N2O Cylinders Storage

# 4. OPERATION THEATRE 2:

Coach No. 07890



- 1. Surgeon's Washing Area
- 2. Dress Change Room
- 3. OT Tables
- 4. Recovery Room

- 5. Lie-in Berths
- 6. Store
- 7. Sterilisation Unit
- 8. Generator



# 5. DIAGNOSTIC AND AUDITORIUM: Coach No. 07887

2					
	3	4	5	6	7
1					

- 1. Electricity & AC Panel
- 2. Toilet
- 3. Auditorium
- 7. Guard's Room
- 4. Ophthalmic Testing Room
- 5. Audiometry Room
- 6. Dental Diagnosis & Treatment Room



### APPENDIX II

#### PROTOTYPE OF CONTRACT LETTER

Dear Sir,

#### Sub: IMPACT INDIA-LIFELINE EXPRESS AT XYZ station.

Impact India Foundation (IIF) greatly appreciates your decision to sponsor an Impact India's Lifeline Express Project at

The main aim of IMPACT INDIA-LIFELINE EXPRESS project is to offer on-the-spot surgical treatment, free of cost, for curative interventions for the disabled poor in rural India using the entire Indian Railway network.

Four air-conditioned and one Non Air-conditioned railway coaches have been designed as a modern, fully- equipped mobile hospital with two Operating Theatres. Each Operating Theatre provides diagnostic and surgical facilities for restoration of sight, movement, hearing, correction of cleft lips and training facilities for doctors working in remote areas.

The train will be shunted into a nearby siding about a week before commencement of the project and will be stationed for a period of about 3 to 4 weeks, when local health services will be reinforced. The aim of the Foundation is to supplement and not to substitute local health activities.

The success of the project which is important to IIF as it is to you depends upon the support, cooperation and collaboration we receive from the local partner at the project side in order to ensure that maximum number of patients are benefited. The Project is being undertaken in the believe that the sponsor fulfills the responsibilities mentioned in this letter.

Impact India will provide a fully equipped and administered hospital train, I with all facilities. Decides surgical operations this train will also provide professional facilities for diagnosis and correction visual of and hearing problem for which the preliminary work will have to be done by the sponsor.

Impact India will provide a fully equipped and administered hospital train, I with all facilities. Impact India will provide the designs for posters and banners for the purpose of publicizing the project. All references to LIFELINE EXPRESS will be as "IMPACT INDIA-LIFELINE EXPRESS". The name "LIFELINE EXPRESS" will not be coupled with any other name. It is hereby understood that LIFELINE EXPRESS is a project of Impact India Foundation.



Responsibilities of the collaborating partner

1. <u>Surgical Interventions</u> : Being a valuable national resource, you will ensure optimum utilization of the surgical facilities of IMPACT INDIA-LIFE LINE EXPRESS. In order to make the project, in minimum number of 700 surgeries need to be conducted.

#### 2. Medical Personnel:

- a) The Medical personnel selected or provided by the partner shall be fully qualified and experienced in their respective fields of specialization. IIF shall be provided with a brief resume of at least surgeons and Anesthetists.
- b) The sponsor shall be solely responsible for the follow up treatment of the patients treated on the Life Line Express. The follow up treatment shall be reported IIF periodically in the prescribed form.
- c) It is clearly understood that the sponsor would be fully responsible for any claim or demand that be made by a patients treated on the Life Line Express. The Sponsor is advise to take appropriate Insurance cover in this regard.
- Communication Aids and Personnel: It would be of advantage if televisions and videos are available to show educational films to villagers at the project site, and public address systems to communicate in the field. Posters, survey / registration forms, banners, meal coupons are required.
- 3. <u>Volunteers:</u> Volunteers are required for registration of patients and other duties.
- 4. <u>Drugs and Medicines:</u> A total of approximately 6,000 patients are served on the train including about 100 operations for Orthopaedic surgeries, 500 for Ophthalmic (Cataract), 100 for Cleft Lips and 200 for Hearing disabilities, for whom drugs are required. It should be possible to get donations in kind from the Pharmaceutical Industry. A tentative list of medicines is available for each project.
- 5. <u>Vehicles for use at the site:</u> About six vehicles of the following descriptions are required.
  - a) Two ambulances for transporting patients
  - b) Two four wheelers for advance publicity in the villages; and
  - c) Two four wheelers to bring the doctors to and from the station / living quarters to the project site.
- 6. <u>**Guest House facilities:**</u> About 10 rooms near the site are to be made available for doctors and paramedical staff from outstation.
- 7. **Food:** Food to be provided for indoor patients and one guardian each who will be staying project site for about six days for each type of surgery.



- 8. <u>Temporary wards:</u> The patients who have been operated upon are accommodated in a recovery ward i.e. a nearby district hospital or school building for the duration of the project. About 200 beds / mattresses are to be provided.
- 9. <u>Aids:</u> Calipers, hearing aids, spectacles / lenses are to be provided. Arrangements are made by the Collaborator at his cost.

Impact India would like to ensure that adequate follow-up treatment is provided to the patients. For this purpose, a list of those operated on the train will be submitted by Impact India Foundation to the collaborator for action. The Collaborators are required to arrange post-operative checks after 15 days / 45 days / 2 months.

You are requested to study the operating manual of IMPACT INDIA-LIFELINE EXPRESS which covers all details of the management and requirements of each project.

Impact India looks forward to working with you for the benefit of those in need.

Kindly sign and return one copy of this letter as a token of your acceptance of this Memorandum of Understanding.

Yours sincerely,

Sd/-

Impact India Foundation



# APPENDIX III

#### SAMPLE CONTRACT WITH CATERER

Date: \_\_\_\_\_

Dear Sir,

# Sub: Award of Catering Contract for IMPACT INDIA'S LIFELINE EXPRESS – Catering arrangements from \_\_\_\_\_\_ to \_\_\_\_\_ at XYZ station.

We are pleased to award the catering contract to you on the following terms and conditions.

- 1. The duration of IMPACT INDIA-LIFELINE EXPRESS catering arrangements commence from \_\_\_\_\_\_ to \_\_\_\_\_. Any extension of date will be intimated to you well in advance.
- 3. You will be required to make the catering arrangements at XYZ station.
- 4. The approximate number of persons availing the facility will be specified a week prior to the commencement of the project. You will, however, be informed about the exact requirement on the previous evening, by us. Apart from the number of persons given in the enclosed list, you will also be required to make catering arrangements for 20 to 50 volunteers, paramedical staff and others.
- 5. You will provide the following menu:

#### **MORNING BREAKFAST OR AS PER LOCAL HABITS:**

One glass tea / milk / one pau (small loaf of bread) and one piece cake.

#### <u>LUNCH</u>

Two *katoris* (cups) rice, one *katori* (cup) *dal* (lentil soup), two *katoris* (cups) *sabji* (vegetables) and three *chapattis* (flattened bread of wheat).

#### **EVENING TEA**

One glass of tea and two biscuits.

#### **DINNER**

Two katoris rice, one katori dal, two katoris sabji and three chappatis.

- 6. For the 20 to 50 others, you will provide unlimited lunch and dinner along with morning and evening tea.
- 7. For the entire menu as described in item No.4, you will be paid an all inclusive sum of Rs.\_\_\_\_/- per head per day.

- 8. Space at the XYZ Railway Station with necessary *shamiana* (Tent) covering, necessary lighting and water arrangements will be arranged by us. The costs of all the other items, including fuel, have to be borne by you.
- 8. Patients have been told to bring their own utensils for meals to be served.

You will be required to bring plates, *katoris* and glasses to serve Volunteers and others.

- 9. In case any Patient, or his representative, desires to have additional items to the fixed menu mentioned in column No.4 above, you may charge them your rates.
- 10. As requested by you, an advance will be paid to you, in the initial stage, which

will be settled subsequently with your bills. You will submit your bills on a weekly basis to be settled by us on the 10<sup>th</sup> day. Please also note that IMPACT India's representative will certify the number of Patients who have availed the catering facilities and payment will be made only as per this certification.

As required by you, payment will be made through cheque in the name of XYZ payable at bank XYZ.

Kindly sign on the duplicate copy of this letter, in token of acceptance of the contract as per terms and conditions mentioned above.

Thanking you,

Yours faithfully,

Sd/-XYZ Limited Authorised Signatory

# NOTE:-

- Forms are a guideline
- The computerisation of Patients' records require the prescribed format.
- Volunteers are requested to complete Forms as per the information specified.



# **APPENDIX IV**

#### PUBLICITY HANDBILL (to be printed in the regional language)

### IMPACT INDIA'S LIFELINE EXPRESS

Physical disability and ENT surgeries performed free of charge

# Golden Opportunity for the Disabled

IMPACT INDIA-LIFELINE EXPRESS is the world's first Hospital train, which has all the equipment for screening, treatment and surgeries to be performed free of charge. The schedule for the services is mentioned below:

Place:	<b>Railway Station</b>
Screening / treatment / surgery	Service available
Orthopaedic	Date
(Patients up to the age of 15 yrs. will be given callipers)	)
Cleft lip (correction through Plastic Surgery)	Date
Patients having Cataract and other eye ailments	Date
(The Patients operated for Cataracts will be given	
spectacles)	
Deafness and other hearing disorders	Date
(Patients will be provided with hearing aids)	
Those who require surgery will have to stay at the proje	ect site for about 5 days.
1. Lodging and boarding will be provided to the Pa	tient and only one
Guardian / Attendant, free of cost.	
2. Patient and the Attendant have to bring their ow	n bedding and plates for
meals.	

- 3. Each Patient will be treated only according to the above-mentioned schedule
- 4. For any other additional information please enquire with local Primary Health Centres and health workers.

Each Patient should be accompanied by one person only.



#### **APPENDIX V**

#### AGREEMENT BETWEEN THE IMPACT INDIA FOUNDATION Nhava House, 65 Maharshi Karve Road, Mumbai – 400 002 AND PRESIDENT OF INDIA REPRESENTED BY SECRETARY, MINISTRY OF RAILWAYS

This agreement entered into on this 11<sup>th</sup> day of July 2007, between the Impact India Foundation, a registered Public Trust under Section 29 of the Public Charitable Trust Act, 1950, having its office at Nhava House, 65 Maharshi Karve Road, Mumbai – 400 002 (hereinafter referred to as party of the First Part) and the President of India (hereinafter referred to as party of the Second Part)

WHEREAS party of the First Part has set up a mobile hospital using four broad gauge coaches for outreach areas offering on-the-spot diagnostic, medical and surgical treatment for prevention and curative intervention to restore sight, mobility and hearing and is proposing to use five broad gauge (4 AC and 1 non-AC) coaches to conduct medical tests and training in rural areas of India.

#### NOW THIS AGREEMENT WITNESSETH:

1. that in consideration of the party of the First Part having set up a mobile hospital facilities to impart on the spot diagnostic, medical and surgical treatment for prevention and curative intervention to restore sight, mobility and hearing of persons living in the rural areas, and to conduct medical tests and training, the party of the Second Part agree to the proposal on the following terms and conditions:-

# **COVENANTS OF THE PARTY OF FIRST PART**

- 2. The Party of the First Part covenants to do the following:
  - (ii) The project will be conducted anywhere in India only where broad gauge exists.
  - (iii) Impact India Foundation (IIF) will furnish monthly feedback to the Ministry of Railways (Railway Board) about the area served and number of cases attended during the end of the last month.
  - (iv) IIF will give due adequate publicity that coaches have been provided by Railways and Lifeline Express will run in collaboration with the Ministry of Railways.
  - (v) Impact India Foundation will furnish specifications and other technical details for remodeling of Five Coaches, within two months from the date of this Agreement.

- (vi) To bear all cost of such remodeling and refurnishing of rolling stock.
- (vii) Infrastructural arrangements like making approach roads, water supply, electric supply and sanitary arrangements, where not available, should be arranged by the IIF in consultation with local authorities, Panchayat, etc.
- (vii) IIF will bear the entire cost of all ancillaries including generating sets, medical equipment and miscellaneous equipments.
- (viii) IIF will undertake all social, technical and medical work in running the mobile hospitals.
- (ix) In case service tax or any tax of like nature becomes payable in future the same shall be payable by the party of the first part.

# 3. <u>COVENANTS OF THE PARTY OF SECOND PART</u>

- 3.1 Party of the Second Part covenants to do the following:-
  - (i) To make available five Broad Gauge (4 AC coaches and one Non AC Coach) for use by the party of the First Part for the purpose mentioned in Para-1.
  - (ii) To prepare estimate of costs of remodeling five coaches within two months of furnishing of the details of remodeling of the coaches by the party of the First part referred to in para 2(iv) supra of this agreement.
     The cost of remodeling would be non-negotiable.
  - (iii) Remodeling of coaches shall be started only after the receipt of the full cost and compatible equipment (if any) from the party of the First part and completed within six months of receipt of such cost.
  - (iv) A limited number of permanent staff required for upkeep of costly equipment and issued with Identity Cards by the IIF may remain on board at project sites and when moving from one site to another.
  - (v) A revolving deposit of Rs.1.60 lacs may be kept with the Central Railway to meet contingent expenditure arising on the run of the Lifeline Express. These expenses will be adjusted against lumpsum deposit, which will be replenished to that extent by IIF.
  - (vi) Maintenance charges, which will be levied at 50% of the applicable cost of maintenance for an AC Coach, are payable annually like other charges. Maintenance charges are subject to escalation every year at 10% per annum.

- (vii) When five coaches or less run as part of regular Mail/Exp./Passenger Train haulage charges will be recovered at 25% of the actual cost of movement of AC sleeper class coaches as revised from time to time.
- (viii) Existing detention charges i.e. a token amount of Rs.5.00 (Five) per eightwheeler vehicle per day will continue to be collected.
- (ix) Charges for running the Lifeline Express as a separate train will be as notified in Board's Letter No. TCII/2221/91IIF/Vol.II dated 05.12.96 except clause (i) where charges will be for five coaches instead of four and (ii) a revolving lumpsum deposit of Rs.1,60,000/- instead of Rs.1,30,000/- will be maintained by Central Railway to meet contingent expenses which will be deposited by the party.
- (x) To indicate, through ED (Coaching), working with party of the Second Part, the station where the above said medical facilities is described in this Agreement.
- (xi) To endeavour to give any facility requested for by the party of the First Part after receipt of cost from the party of the First Part.

# 4. ARBITRATION

- (a) In the event of any question, dispute or difference arising under the conditions of this Agreement or in connection with this Agreement, in place of MOU entered into on 12<sup>th</sup> October, 1990, the same shall be referred to the sole arbitration of a Gazetted Railway Officer of the Railway Board appointed to be the arbitrator by the Chairman, Railway Board, Ministry of Railways and the award of the arbitrator shall be final and binding on the parties to this Memorandum.
- (b) In the event of the arbitrator dying, neglecting or refusing to act or resigning or being unable to act for any reason, or his award being set aside by the court for any reason, it shall be lawful for the authority appointing the arbitrator to appoint another arbitrator in place of the outgoing arbitrator in the manner aforesaid.
- (c) It is further a term of this Agreement that no person other than the person appointed by the authority, as aforesaid, should act as arbitrator and that, if for any reason that is not possible, the matter is not to be referred to arbitration at all.
- (d) The arbitrator may from time to time with the consent of all the parties to the Agreement enlarge the time for making the award.
- (e) Upon every and any such reference, the assessment of the cost incidental to the reference and award respectively shall be in the discretion of the arbitrator.

- (f) Subject as aforesaid, the Arbitration and Conciliation Act, 1996 and the rules hereunder and any statutory modifications thereof for the time being in force, shall be deemed to apply to the arbitration proceedings under the clause.
- (g) The venue of arbitration shall be at New Delhi or such other place as the arbitrator at his discretion may determine.
- (h) In this clause the authority to appoint the arbitrator includes, if there be no such authority, the officer who is for the time being discharging the functions of that authority, whether in addition to other functions or otherwise.

# 5. **RESPONSIBILITIES OF THE PARTIES**

- (a) It is hereby declared by and between the parties that party of the Second Part shall not in any way be responsible for any liability arising out of or in the course of medical treatment rendered by the party of the First Part notwithstanding the fact that such a treatment is being given in the premises of the party of the Second Part.
- (b) The party of the Second Part shall not be held responsible for any loss, theft, or damage of medical equipments and other accessories and also for the injury etc to the persons working on behalf of the party of the First Part.
- (c) That the party of the First Part hereby agrees that it shall at all times indemnify the party of the Second Part against all claims which may occur in respect of activities of the party of the First Part under this Agreement. Provided always that in the event of any claim against the party of the Second Part, the party of the Second Part shall notify the party of the First Part of the same and the party of the First Part shall at their own expense either settle any such dispute or conduct any litigation that may arise there from.
- (d) The party of the first Part shall at all times also keep the party of the Second Part indemnified against claims of third parties, if any, regarding the matters covered by this Agreement.

## **GENERAL**

- (a) The Agreement shall be valid for a period of 5 (five years) from the date of signing of Agreement unless terminated earlier with mutual consent of both the parties.
- (b) The stamp duty, if any chargeable under this Agreement shall be payable by the party of the first part i.e. IIF.

#### MANUAL ON **IMPACT INDIA-LIFELINE EXPRESS**



This Agreement shall be governed by the laws of India for the time being (C) in force. The courts of New Delhi shall alone have jurisdiction to decide any dispute arising out of or in respect of this Agreement.

IN WITNESS WHEREOF the parties have signed this Agreement on Date, month and year above written.

**WITNESS** 

Sd/-

Sd/-1. (NAME AND DESIGNATION)

Chief Executive Officer Signed for and on behalf of Impact India Foundation, Nhava House, 65-Maharshi Karve Road Mumbai – 400 002.

Sd/-

Sd/-

Secretary, Railway Board Signed for and on behalf of The President of India.

2. (NAME AND DESIGNATION)



# APPENDIX VI

## Sanitary Arrangements in the project

<u>Toilets at Ward:</u> Since two to four hundred Patients, including their Attendants, are expected to be in the project at one time (particularly towards the later part of the Orthopaedic surgeries and the entire period of Cataract surgeries) a sufficient number of toilets and bathing cubicles are required to be provided near the ward.

It is advisable to have ten Indian style toilets each, for male and female Patients. The number of toilets may be reduced in keeping with the number of Patients anticipated.

<u>Commodes</u>: The commodes used for toilets may be of porcelain, clay or cement. The commode and the septic tank will be connected directly with an 'S' type connection.

<u>Septic tank:</u> Septic tank (temporary) can be made immediately behind the toilets and it will be linked to the commode with an 'S' type connection pipe. The safety tank will have a 4" width, 4" depth and the length will be equal to the length of the area covered by the toilets.

The septic tank pit will be a temporary construction and the sides of the pit will be provided with a 5" brick wall leaving regular holes between the bricks to allow easy soakage of night soil.

The bottom surface of the safety tank will be left wet to allow soakage of night soil. The top will be covered with cement slabs or wooden planks and mud. An exit pipe for gas will be provided in the septic tank. The design can be changed according to local needs.

<u>Toilets on train:</u> The three toilets on the train are required to be connected to a temporary septic tank with sewer pipes and 'S' connection. The size of the sewer pipe will be of 4" diameter. These toilets are used by Doctors.

The temporary septic tank can be made near to the centre coach as all three toilets are situated not far from each other.

The size of the septic tank will be 4" wide, 4"" long and 4" to 6" deep. The construction of a septic tank will be the same as above except the size which will be  $4" \times 4" \times 4"$  (4" wide x 4" long x 4" deep).

<u>Toilet for Personnel working on the Train:</u> One toilet with bathing facilities is required to be provided near the train for use by the staff and personnel working on the train, as the toilets in the train are used only by Doctors. To avoid overloading of the septic tank and the unhygienic odour which emits from it, a separate arrangement is required near the tank.

<u>Water supply:</u> All the above toilets are required to be provided with adequate water supply.



<u>Bathing Cubicles:</u> If possible, five bathing cubicles separately, for males and females, be provided. It may be reduced to 2 to 3 each but the bathing cubicles should have adequate water supply.

<u>Sanitation and Disinfection of area:</u> The area around the train, project site and connecting roads are required to be kept clean and disinfected all the time. Therefore, two sweepers will be provided on the train from 7a.m. till the operation finishes to clean the Operation Theatres and the train and also disinfect and sterilise the Operation Theatres and train for the next day's surgery.

Sufficient numbers of sweepers are required to keep the toilets and bathing cubicles near the ward clean. Sweepers are required (one each) during the day and night in the ward for cleaning and also to attend to Patients' needs.



	PPFND				
	APPENDIX – VII IMPACT INDIA-LIFELINE EXPRESS XYZ Station				
PRIMARY	ASSES	SMENT FORM			
Sr. No PHC/CHC Patient's Name Father's/Guardian's Name Address: Village Taluka / Block	F	AgeSex  ost Office			
FAMILY HISTORY         Number of Children, BrothersSistersDependants         Treated before: Yes/No (If "Yes" please fill the following treatment history)         Source of Previous Treatment         1. Private Physician       2. Private Hospital       3. Govt. Hospital       4. Project         5. Home Remedy       6. Puja       7. Traditional Medicine Practitioner (Bhagat)         Details of Previous Treatment					
<u>Sources of Publicity information</u> 1. Handbills/Posters 2. Loudspeaker 6. Fellow villagers 7. Anganwadi W					
DIAGNOSISA. CleftB. DeafnesCleft lip only (CCL)Right Ear (ICleft Palate only (CCP)Left Ear (DICleft lip & Palate (CCLP)Both Ears (IOthers (CCO)Others (DODiagnosis Notes	DRE) LE) DBE)	Left Leg (PLL) Both Legs (PBL)	Both Eyes (CBE)		
RECOMMENDED TREATMENT					
Report to Lifeline Express Reporting date	Reporti	ng time	Signature of Doctor Place of Reporting		

To be completed by Primary Health Centre (PHC) Doctors for each potential Patient of IMPACT INDIA-LIFELINE EXPRESS. Doctors must indicate the date, time and place as per the Schedule of Surgeries, for Patients to report to the train with this Form.



APPENDIX – VIII IMPACT INDIA-LIFELINE EXPRESS XYZ Station				
		REGISTRATIO	N FORM	
			REGISTRATION N	0
Patient's Nam	ie		Age	Sex
Father's / Gua	ardian's Name			
Address:	Village	Post Office	Taluka/Block	Dist
Age group: A. 1- 4 yrs. B. 5-9 yrs. C. 10-14 yrs D. 15-19 yrs. E. 20-39 yrs. F. 40-59 yrs. G. 60yrs.+			yrs. E. 20-39 yrs.	
PHC/CHC from, Referring doctor				
DIAGNOSIS				
<b>A. Cleft</b> Cleft lip only (CCL) Cleft Palate only (CCP) Cleft lip & Palate (CCLP) Others (CCO)		<b>B. Deafness</b> Right Ear (DRE) Left Ear (DLE) Both Ears (DBE) Others (DO)	<b>C. Orthopaedic</b> Right Leg (PRL) Left Leg (PLL) Both Legs (PBL) Others (PO)	<b>D. Cataract</b> Right Eye (CRE) Left Eye (CLE) Both Eyes (CBE) Others (CO)

This Form is to be completed by the Volunteer or Registration-In-charge of the Out Patient Department (OPD) at the LIFELINE EXPRESS project site for all Patients, even those who may come from various Blocks with/without their Primary Assessment Forms.

.....

After the Registration formalities are complete the Patient is sent to the concerned OPD to be examined by Doctors. What follows in **Appendix IX** are the Assessment Forms specific to each type of disability: Orthopaedic, Plastic Surgery, Hearing/Audiogram and Opthalmic:



		Α	PPENDIX - IX	
Coll	aborator's Logo		DIA-LIFELINE EXPE HT TO XYZ STATIC BY XYZ LTD.	
		ORTHOPAEL	DIC ASSESSMENT	FORM
			Registration N	umber:
Nan	ne of Patient		Age	Sex
Exa	mining Doctor:		Place:	
B.P.	. :			
Date	e of coming to t	he train on:		
I.	COMPLAINTS	S:		
	Duratio a. Pain:	n:		ation: ness:
	c. Swelling	g:	d. Par	asthesia:
	e. Others:			
II.	DESCRIPTIO		Y:	
	AETIOLOGY:			
	Congenital	Polio	Neoplastic	Cerebral Palsy
	Traumatic	Dystropic	Infective	Others
	Cervical	Dorsal	Lumbar	
Reg Extr	ion: emities: UL/L	L	R	/L
Higł	ner Functions: _			



APPEN	
IMPACT INDIA-LI	FELINE EXPRESS XYZ STATION
PLASTIC SURGERY	ASSESMENT FORM
	Registration Number:
Name of Patient :	
Examining Doctor:	Place:
General Examination:	
B.P.:	
I. COMPLAINTS:	
II. DESCRIPTION OF DEFORMITY:	
III. CORRECTION NEEDED:	
Notes:	Doctor's Signature



APPENDIX – IX	
IMPACT INDIA-LIFELINE EX XYZ Station	PRESS
HEARING ASSESSMENT	FORM
	Registration No
Name of Patient Examining Doctor General Examination 3.P.	Place
COMPLAINTS	
DESCRIPTION OF DISEASE	
FREATMENT NEEDED	
	(Doctor's signature)
Notes	

N.B. The Audiogram is to be printed behind this form.

#### MANUAL ON IMPACT INDIA-LIFELINE EXPRESS



APPENDIX – IX				
IMPACT INDIA-LIFELINE EXPRESS BROUGHT TO XYZ STATION BY XYZ LTD.				
AUDIOGRAM				
1. NAME: SEX/ AGE: REGISTRATION NUMBER:				
2. ADDRESS: OCCUPATION:				
3. DIAGNOSIS: DT. OF AUDIOMETRY:				
-10       -10       -10       -10         0       -10       0       0         10       -10       0       0         20       -10       0       0         30       -10       20       30         40       -10       20       30         40       -10       -10       20         30       -10       -10       20         30       -10       -10       -10         50       -10       -10       -10         50       -10       -10       -10         10       -10       -10       10         10       -10       -10       10         10       -10       -10       10         12       -20       50       100       200       400       600       800				
AIRX = LEFT EARO = RIGHT EARRinneHearing Loss for SpeechRL				
BONE < = LEFT EAR > = RIGHT EAR <u>WEBER</u> Discrimination Score <u>R</u> <u>L</u> Masking				
No Response:				
Audiologists Remarks:				
Audiometer: Tester:				
Notes:				



	ŀ	PPENDIX	– IX		
			INE EXPRESS Z STATION ).		
	OPTHALM	IC ASSESS	SMENT FORM		
Name: Number:	Age	:M/F			Registration
2	·				
Eye examination	on: Conjunctiva		R.E.	L.E.	
	Cornea Iris Pupil Lens Sac Vision with glass Without glasses Tension Fungus Others				-
Diagnosis:					
Treatment:	Medical: Surgical:		Date of Operati	on:	
Follow up reco	mmendations:				
				Treating	Doctor



### **APPENDIX – X**

#### **IMPACT INDIA-LIFELINE EXPRESS**

**XYZ** Station

## **ADMISSION FORM**

REGISTRATION NO.....

Patient's Name ...... Sex .....

Recommended Surgery LIP.....B.HEARING A.CLEFT CATARACT.....

.....D.

**Recommended Surgical Note** 

#### **CLINICAL REPORT**

Blood:	Hb		TLC	
			Neutrophils	
			Basophils	
		•	СТ	•
	HIV 1	& 2 Antibodies (Spot/E	lisa)	
			Sugar	

.....

(Signature of Pathologist)

Pre operation treatment

- TT
- Antibiotics •
- Sensitivity test
- Site preparation •
- .....
- .....

#### SURGERY DETAILS

Date of Surgery,	Name of Surgeon
Surgery procedure	-
Notes	

## (SIGNATURE OF SURGEON)

# ANAESTHESIA DETAILS

Type of Anaesthesia GA/LA/Spinal/Others Notes	

# (SIGNATURE OF ANAESTHETIST)

.....contd.....



#### **Continuation of Admission Form**

Follow up Date ..... Appliances to be given .....

Post Operative Advice

IMPACT INDIA-LIFELINE EXPRESS - world's first hospital train
--



## **APPENDIX XI**

## **CONSENT FORM**

(To be printed in the regional language)

CONSENT FOR ANAESTHESIA AND OPERATION
I/We hereby give consent for giving anaesthesia for internal surgery at my / our own risk for the Patient. I/We fully understand the implications of giving anaesthesia and I/We have been made fully aware of the same.
Signature:
Name:
Relation with the Patient:

This Form is used as a Declaration of Consent stating that the Patient understands the procedures of the surgery prescribed and has given her/his consent to it. These Forms must be printed, in the local language, as a separate booklet. Each sheet is detached and stapled to the Registration Form for each Patient who undergoes surgery.

.....



## **APPENDIX – XII**

## MEAL CARD

## IMPACT INDIA-LIFELINE EXPRESS XYZ Meal Coupon

 Regn. No.\_\_\_\_\_

 Name of the Patient: \_\_\_\_\_\_

Registration Date:\_\_\_\_\_

Date: \_\_\_\_\_ Lunch: \_\_\_\_\_ Dinner: \_\_\_\_\_

Note: On losing this card, another card will not be issued.

To be issued to Patients who are admitted for treatment, this Coupon entitles them and their Guardian to three meals a day. The Coupon serves a dual purpose – it discourages gatecrashers and helps the Collaborator/Sponsor to monitor the number of meals served.



## **APPENDIX – XIII**

## IMPACT INDIA-LIFELINE EXPRESS XYZ Station

## **DISCHARGE CARD**

REGISTRATION NO.

Name of Pa	atient	Age		Sex
Father's/Gu	uardian's Name			
Address:	Village	Taluka/Block	Dist.	

Date of admission	Date of Treatment/Surgery	Date of Discharge
//	//	//
Nature of deformity/disease		
Nature of Surgery		
Date of Surgery		
TT given on		
Aids & Appliances		
Care required at home		
Next date of Follow up		

(Doctor's Signature)

This Discharge Card is given when the Patient is discharged after surgery/treatment, or on receipt of appliances. This Card should be carried by the Patient as a record. It will be invaluable for any follow-up required and should therefore preferably be preserved in a transparent plastic cover to ensure longer life.



## **APPENDIX – XIV**

## **IMPACT INDIA-LIFELINE EXPRESS**

XYZ Station Patient's/Guardian's Feedback Form (To be printed in local language)

	Registration No					
Patient's name Sex						
Father's/Guardian's						
Address: Village, Post office, Taluka/BlockDist						
Patient's/Guardian's satisfaction with IMPACT INDIA-LIFELINE EXPRESS Project (Answer Yes / No to each of the following)						
Is medical treatment satisfactory?	Yes/ No					
Are proper aids provided?	Yes/ No					
<ul> <li>Is good quality food provided?</li> </ul>	Yes/ No					
Is sufficient medicine provided?	Yes/ No					
<ul> <li>Is good care taken by volunteers?</li> </ul>	Yes/ No					
Comments of Patient / Guardian						
	(SIGNATURE)					



## APPENDIX – XV

## **IMPACT INDIA-LIFELINE EXPRESS**

XYZ Station

#### QUESTIONNAIRE TO BE COMPLETED BY THE SURGEONS WHO HAVE CONDUCTED SURGERIES ON IMPACT INDIA-LIFELINE EXPRESS Batings are on a 1 to 5 scale (1 = negative; 5 = positive)

Ratings are on a 1 to 5 scale (1 = negative; 5 = positive)					
Sr.	Criteria	Rating	Remarks		
No.		(1 to 5)			
1.	Cleanliness of OperationTheatres				
2.	General cleanliness of the train				
3.	Condition of:				
	* Operating Tables				
	* Operating Lights				
	* Anaesthesia Machines				
	* Microscopes				
	* Suction Machines				
	* Surgical Instruments				
	* Linen				
	* Others				
4.	Availability of:				
	* Refreshments				
	* Surgical instruments				
	* Emergency measures				
	* Sterilisation facilities				
	* Post-Operative Follow-up				
5.	Overall Facilities on the train				
6.	Efficiency of the Operation Staff				
7.	Suggestions for improvement in the system:				

Name, Address, Contact Telephone / Mobile / Fax / Email and area of Specialisation:

Date:

Signature:



Nhava House, 1st Floor, 65 Maharshi Karve Road, Mumbai 400002. India Tel.: (91-22) 6633 9605-7 Fax. (91-22) 2201 0594 Email: impactindia@mtnl.net.in Web.: www.impactindia.org