PREFACE

Due to geographical location of Uttarakhand the people of this State have to face several problems to get health facilities. In the rural areas of the State, adequate health facilities are not available. In case of illness, most of the persons of these areas have to depend on the hospitals of the urban areas. To reach the urban areas they have to depend either on the government transport service or have to hire some vehicle by spending more amount. The economically weaker and poor persons are not in a position to bear this burden of expenses. As a result of that they cannot get proper treatment. In the rural areas, even the women at the time of their delivery are not able to get proper treatment. In some cases the women even die during the delivery pain. Keeping in view these problems the government of Uttarakhand addressed this issue by collaborating with GVK Emergency Management & Research Institute (GVK EMRI) and launching the 108 Emergency Response Service to provide ambulance services.

EMRI 108 Ambulance Service is providing referral transport in response to each call made to it through its toll-free number. These services began in the state in May, 2008. But till date no external evaluation of 108 EMRI Ambulance Service has been done to see how effective this system is and what more can be done for further development of this system. This is an attempt in this direction.

The study is divided into six chapters. The first chapter is an introductory nature and deals with the objectives and methodology of the study. Chapters second to six in serial order deal with: socio-economic back ground of the sample beneficiaries of the sample districts; physical condition of 108 ambulances and evaluation of presence and working of the employees working in them; administrative expenditure of EMRI and operational expenditure of 108 ambulances; utility and quality of EMRI operated 108 ambulances. The last chapter is a concluding one. It briefly sums up the findings of the study and offers certain policy recommendations.

Every research work is a product of collective efforts, ours too was no exception. Every one hence deserves our gratitude those who helped us in the preparation of this report. First of all, we express our thanks to State Planning Commission Uttarakhand, for reposing confidence in Himalayan Region Study and Research Institute, Delhi to undertake this study. I would like to thank to Shri Amit Singh Negi(Secretary State Planning Commission, Uttarakhand), Shri Bhupal Singh Manral(Prabhari Secretary), Mr. Dinesh Chandra Verma (Joint Director) and Dr. B.K. Joshi (Senior Research Officer) for providing us time to time academic support.

Our Thanks are due also to:
- All the members of the governing body of Himalayan Region Study and Research Institute, Delhi for their kind co-operation and support.
- All the members of the research staff for their assistance in data collection.
- All the sample beneficiaries and official respondents for sparing their valuable time and responding our questions to the desired levels.
- Mr. Ashok Kumar and Ajay Kumar for preparing the report on computer with care, diligence and efficiency.

Finally, no work of this kind could be accomplished without free time from family responsibilities. My wife Shanti Bhatt and daughter Khushi Bhatt have shown tremendous adjustment in this regard. I am deeply indebted to them for their patience and encouragement.

Dr. G.D. Bhatt

Dated.22/07/2019   Project Director

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EXECUTIVE SUMMARY

Due to geographical location of Uttarakhand the people of this State have to face several problems to get health facilities. In the rural areas of the State, adequate health facilities are not available. In case of illness, most of the persons of these areas have to depend on the hospitals of the urban areas. To reach the urban areas they have to depend either on the government transport service or have to hire some vehicle by spending more amount. The economically weaker and poor persons are not in a position to bear this burden of expenses. As a result of that they cannot get proper treatment. In the rural areas, even the women at the time of their delivery are not able to get proper treatment. In some cases the women even die during the delivery pain. In view of these facts Department of Health and Family Welfare Government of Uttarakhand signed an agreement with Emergency Management and Research Institute (EMRI) Secunderabad on 8 March 2008 to provide emergency respose services and emergency medical services for all the people of Uttarakhand State.

The Himalayan Region Study and Research institute undertook an evaluation study of cost effectiveness and utility of EMRI operated 108 ambulances in view of the following objectives. For this evaluation, 6 districts of Uttarakhand were selected. From the year 2010 to 2014, a total of 6,44,007 beneficiaries were benefited by the EMRI operated 108 ambulances. Out of these, 3,021 beneficiaries were selected through random sampling method for intensive study. These beneficiaries included those suffering from pregnancy, ambulance delivery, road accident, heart problems and other stomach ailments.

Objectives of the study

1. Administrative/Operational Cost analysis of the services provided by EMRI operated 108 Ambulances.
2. Evaluation of Utility of services provided by EMRI operated 108 Ambulances for BPL and APL sections of the society.
3. Evaluation of the entire gamut of services being provided by 108 Ambulances.
4. Position of regular use/maintenance of the machines/appliances available in the 108 Ambulances.

5. Position of regular availability of staff in the 108 ambulances.

6. Analysis of operational cost utility/excess.

7. Comparative study of cost and operational expenditure of 108 Ambulances services vis-à-vis other states and analysis of National Rural Health Mission (NRHM) grant.

8. Evaluation of the work done by 108 Ambulances, its expenditure and facilities given by it to the beneficiaries in the light of MOU signed with the government of Uttarakhand

9. Difficulties/Suggestions of the beneficiaries of 108 Ambulances/its drivers/medical assistants/operating groups.

Main Conclusion vis-a-vis Objectives of the Study

1. Based on the social and economic analysis of the sample beneficiary respondents, out of 3021 sample beneficiary respondents, 1530 (50.65%) were above the poverty line and the remaining 1491 (49.35%) were living below the poverty line.

2. Out of a total of 3021 sample beneficiary respondents, 2121 (70%) were female related to pregnancy case who benefited from this scheme.

3. Out of a total of 3021 sample beneficiary respondents, 2322(76.86%) were young (those falling in the age range of 18 to 35 years), 514(17.01%) were middle aged (those falling in the age range of 36 to 55 years), 171(5.66%) were old (those having cross the age of 55 years) and the remaining 14(0.46%) were child (those falling below the age of 18 years).

4. Out of a total of 3021 sample beneficiaries, 1165(38.56%) beneficiaries received the services of 108 ambulances within 30 to 40 minutes after the phone call, 794(26.28%) within 20 to 30 minutes, 470(15.56%) within 40 to 50 minutes, 371(12.28%) within 10 to 20 minutes, 111(3.67%) more than 50 minutes after the phone call and remaining 110(3.64%) within 5 to 10 minutes.

5. In the hilly Bageshwar and Rudraprayag districts, 83(16%) and 219 (43%) sample respondents received the services of 108 Ambulances more than 40 minutes after phone call by the beneficiaries. 61.6%, 28.68%, 61% and 44.7% sample respondents of Dehradun, Haridwar, Udhamsinghnagar and Nainital (both urban and rural areas) respectively received the services of 108 Ambulances more than 30 minutes after phone call. In the agreement, it had been clarified that the EMIR will provide

response services within 35 minutes in the rural areas and within 25 minutes in the urban areas but the EMRI has not been completely able to provide this sort of services as per the conditions of the agreement.

6. Out of a total of 30 sample EMTs, 4(13.33%) had received a training of three months, 1(3.33%) received training for a period of six months, 11(36.67%) for two months the remaining 14(46.67%) had received a training for the period from 5 to 30 days. The EMTs of other districts except Haridwar and Nainital were not trained for more than 3 months, whereas the EMTs of Bageshwar district are working since 5 to 7 years and the EMTs of Dehradun and Rudraprayag are working since 3 to 7 years. This is evident from the fact that only formalities were played in this context of training of EMTs by EMRI 108. In such a short period, an EMT cannot be capable to discharge his duties; it is matter of consideration.

7. Out of a total of 30 sample ambulances, in 27(90%) ambulance there was male EMTs and the remaining 3(10%) there was female EMTs. In the matter of female delivery in the ambulance and providing proper service to the female patient, women EMT should have been given priority.

8. Out of a total of 3021 sample beneficiaries, 2833(93.78%) beneficiaries found both deriver and EMT present in the 108 ambulances while the remaining 188(6.22%) beneficiaries found only the driver present in the ambulances. In Haridwar, Nainital, Udhamsingh Nagar and Bageshwar districts 163(32.47%), 12(2.40%), 11(2.20%) and 2(0.40%) sample beneficiaries respectively found only drivers in their ambulances during service, Which is a very worrying subject. While the presence of EMTs is compulsory in every ambulance. It shows that EMRI has failed to ensure the continuous availability of employees during operational period of the ambulances.

9. In the context of the use of machinery/equipments available in the ambulances it was found in the districts Bageshwar, Dehradun, Haridwar, Nainital, Rudraprayag and Udhamsinghnagar some equipments like oxygen kit automated blood pressure apparatus and glucose meter which is very essential for the life of the patient were not found in complete operational condition and even the maintenance thereof was not found to be satisfactory. Excluding Dehradun district in other districts the sheets and pillows provided on the stretcher were not found to be clean that shows that the cleanness was not taken a special care. Whereas in the repair and maintenance

of the ambulances from the year 2008-09 to 2013-14, the EMRI has spent between 20 to 40 lakh rupees for repair and maintenance. Therefore, despite the responsibility of the repair and maintenance of the EMRI, this important task was ignored by the organization.

10. During the period from the year 2008-09 to 2013-14, out of the total operational expenditure of Rs.1,41,45,24,345.00 the expenditure of the EMRI on repaid and maintenance was between Rs.20,94,987.85(1.39%) and Rs.26,54,397.33(2.72%). But out of a total of 3021 sample beneficiary respondents 1708(56.54%) reported that their ambulances had gone out of order during their services.

11. If the administrative expenditure of the EMRI was calculated against operational expenditure from the year 2008-09 to 2017-18, it ranged between Rs.53,95,838(2.85%) and Rs.1,68,51,410.03(9.59%), maximum Rs.1,68,51,410.03(9.59%) in the year 2011-12 and minimum Rs.53,95,838(2.85%) in the year 2017. If the administrative expenditure out of operational expenditure was calculated in the said 10 years, then it was 10,12,97,284.50(5.71%) out of total operational expenditure of Rs.1,77,32,66,067. The average operational expenditure of the EMRI was Rs.1,77,32,66,066.87(64.75%) out of total grant-in-aid of Rs.2,73,84,51,299/- received during the period from 2008-09 to 2017-18. In the year 2009-10, the operating expenditure on the number of 108 ambulances was 12,56,68,835.64(65.23%) out of total grant-in-aid of Rs.19,26,40,608/-and in the year 2010-11 for the same number of ambulances it was Rs.15,09,97,810(89.77%) out of total grant-in-aid of Rs.16,82,06,699/-. Similarly, in the year 2011-12, for 140 ambulances the total operational expenditure of the EMRI was Rs.17,58,03,437,97(86.30%) of the total grant-in-aid of Rs.20,37,02,930/- and for the same number of ambulances in the year 2013-14, it was Rs.20,41,96,274(62.04%) out of total grant-in-aid of Rs.32,91,45,218/-. Therefore there is no logical equation between the number of ambulances and the operational expenditure. Since the number of ambulances has not increased, the operational expenditure has increased steadily. An analysis of the administrative expenditure of EMRI 108 has shown that administrative expenditure has increased steadily up to the year 2011-12. In the year 2008-09 the administrative expenditure of the EMRI was Rs.65,94,538.98 and in year 2011-12 it was

Rs.1,68,51,410.03. It shows that the Administrative expenditure increased by Rs.1,02,56,871(155.54%) in the year 2011-12, compared to the year 2008-09 and administrative expenditure after 2011-12 has decreased compared to the previous years.

14. Compared to the year 2008-09, the capital expenditure of EMRI has decreased by Rs.12,48,47,963(99.98%) in the year 2017-18 and operational expenditure has increased by Rs.9,62,37,836(103.64%). On the contrary, in comparison to 2008-09, the administrative expenditure has decreased by Rs.11,98,701(18.18%) in the 2017-18.

15. During the period 2008-09 to 2017-18 per ambulance per month operational expenditure of the EMRI was between Rs. 85977.43 and Rs. 127479.60, maximum Rs. 127479.60 in the year 2015-16 and minimum Rs. 85977.43 in the year 2008-09. If the average per ambulance per month operational expenditure is calculated from the year 2008-09 to 2017-18, then it is Rs. 112369.29. In the year 2009-10 to 2010-11, per ambulance per month expenditure increased by Rs.19,543.97(20.16%), whereas the number of ambulances was the same. Similarly, in the year 2012-13 to 2013-14 per ambulance per month expenditure increased by Rs.9,441.20(8.42%) whereas from the year 2016-17 to 2017-18 per ambulance per month operational expenditure decreased by Rs.14,099.10(11.34%) on the same number of ambulances. It can be evaluated at the level of the health department.

16. If the utility of funds and excess amount is analyzed from the year 2008-09 to the year 2017-18, it has been observed that from 6.06 per cent to 45.47 per cent of the total received grant remained untouched by the EMRI, maximum of Rs.18,37,01,722(45.47%) in 2015-16 and minimum Rs.1,01,96,761(6.06%) per cent in 2010-11. The excess amount of each financial year remains in the bank account of EMRI. The excess amount of each financial year is not returned to the state government, but the amount is being added in the grants-in-aid of the next financial year.

17. From 2014-15 to 2017-18 the average per ambulance per month operational expenditure of EMRI was Rs 1,39,095 in Andhra Pradesh, Rs 1,14,847 in Gujarat and Rs 1,21,486 in Uttarakhand, Rs 41,666 in Rajasthan, Rs 69,444 in Madhya Pradesh, Rs

50,000 in Himachal Pradesh and Rs 1,85,185 in Uttar Pradesh. It shows that the average per ambulance per month operational expenditure of the EMRI in Uttarakhand is higher than other states like Himachal Pradesh, Madhya Pradesh and Gujarat.

18. It is also observed that per ambulance per month operational expenditure of EMRI in Uttarakhand is very high compared to Himachal Pradesh because the geographical location of Himachal Pradesh and geographical location of Uttarakhand is the same. Therefore, per ambulance per month operational expenditure should not exceed Rs. 50,000 / - in Uttarakhand. If the distance of destination place is more than 30 km in that condition an additional payment can be made at the rate of Rs. 8 per km as such a provision has been made in Himachal Pradesh.

19. According to agreement, it was ensured that the EMRI will make efforts to provide world class emergency services and will make constant efforts to bring excellence in their services. But the EMRI has not been successful either in providing the world class services or has not been able to improve the quality of services. In the performance of the EMRI, there is neither any innovation nor any strategic partnership as it was laid down in the agreement.

20. If during the service any ambulance becomes out of order it has a negative effect on the services because the other ambulance could not be available immediately for the patients at the proper time. It appears that the EMRI has not made necessary alternative arrangements to deal with such problems. On the basis of information given by sample beneficiaries, out of a total of 3021 beneficiaries, 1708(56.54%) had to face the said problem. If district-wise analysis is done, 66.60 per cent beneficiaries of Bageshwar district, 47.83 per cent beneficiaries of Dehradun district, 59.96 per cent beneficiaries of Haridwar district, 34.93 per cent beneficiaries of Nainital district, 69.84 per cent beneficiaries of Rudraprayag district and 60 per cent beneficiaries of Udham Singh Nagar district had to face same problem.

21. The main problem of employees working in 108 ambulances is that they are not satisfied with their services condition. The main reason is that they do not get proper wages after working for longer period. Thereby, a sense of alienation has been arisen on them. Even sometimes they have to work for more than 8 hours.

22. It has been observed that majority of the working ambulances are not in proper condition due to their continuous service. Their work capacity has reduced considerably due to which they often break down during service period as a result the operating group has to face many problems to provide quality service to the beneficiaries.

Suggestions:

Based on the findings of the study, the following suggestions are given for successful operation of the scheme: -

1. There is a tremendous need to develop a monitoring system by the state health department for the transparency of operational expenditure made by the EMRI.

2. There is a need to ensure continuous monitoring of ambulances and machinery and equipments kept in them in proper working condition so that the patients may get timely healthcare facilities and keeping in view the field situation the difficulty experienced in the operation of the scheme can be overcome.

3. It is necessary to establish a logical ratio between the number of 108 ambulances and operational expenditure. Operational expenditure should be determined based on the number of ambulances. Prior to providing grants-in-aid to EMRI in the future, the past expenditure incurred in various items needs to be reviewed.

4. Keeping in mind the delivery of women/pregnancy, there is a need for improved delivery and treatment system in the ambulances so that women of remote/ rural areas can get more benefit from this scheme.

5. EMRI has not kept any details of the district-wise and ambulance-wise operational expenditure in the past. Hence the health department should give instructions to EMRI to give monthly and annually details of operational expenditure district-wise and vehicle-wise in future. The health department should also ensure monthly analysis of the same.

6. Women EMT are found in very few numbers in these ambulances. During ambulance delivery or in case of first aid requirement by women, men E.M.T are not preferred by women. Therefore capable Women EMT of prescribed eligibility should be appointed in future.

7. Considering the geographical location of the state, the number of present ambulances appears to be less. In such a district where the population is more or such development block where the facility of traffic is not satisfactory, the number of additional 108 ambulances should be increased in order to provide accidental medical facilities to the people from far off places.

8. The role of the Advisory Committees in all the districts does not seem adequate in monitoring the scheme in their respective districts. Hence, it becomes mandatory to make observer's role performed by advisory committee more answerable and effective.

9. EMRI is a non-profit organization. Therefore, all information should be mentioned in the portal of the organization (list of beneficiaries, post and number of personnel and income-expenditure, fulfilled works etc.) in order to maintain transparency regarding its modus operandi and activities.

10. The Department of Health and Family Welfare should send instructions to all government and non-government hospitals in the state to admit all patients of EMRI 108 ambulances without any delay.

11. EMRI should be instructed to spread awareness about the scheme through campaigns in rural/ backward areas.

12. The working hours of the employees working in the ambulances should be determined according to the rules and they should be given logical pay as per their length of service so that they can serve the patient without being isolated.

13. Only those who have the requisite qualifications should be appointed to the post of EMT.

14. The ambulances should not be brought into operation after a fixed kilometre walk, so that patients may not suffer and they can avail medical facility without any interruption.

15. Complaint number, names of nearby hospitals and their phone numbers should be mentioned in 108 ambulances. This would help patients in getting maximum benefits.

16. If information regarding distance of ambulance from their place and its arrival time becomes available to the patients via Mobile App, it would prove beneficial both for the patient and their family members. In this regard, if possible, State can further think about creating and running such a Mobile App.

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CHAPTER-1

INTRODUCTION, OBJECTIVES AND RESEARCH METHODOLOGY

Due to geographical location of Uttarakhand the people of this State have to face several problems to get health facilities. In the rural areas of the State, adequate health facilities are not available. In case of illness, most of the persons of these areas have to depend on the hospitals of the urban areas. To reach the urban areas they have to depend either on the government transport service or have to hire some vehicle by spending more amount. The economically weaker and poor persons are not in a position to bear this burden of expenses. As a result of that they cannot get proper treatment. In the rural areas, even the women at the time of their delivery are not able to get proper treatment. In some cases the women even die during the delivery pain. Keeping in view these problems the government of Uttarakhand addressed this issue by collaborating with GVK Emergency Management & Research Institute (GVK EMRI) and launching the 108 Emergency Response Service to provide ambulance services.

The Department of Health and Family Welfare Government of Uttarakhand signed an agreement with GVK Emergency Management and Research Institute (GVK, EMRI) Secunderabad on 8 March 2008 to provide emergency response services and emergency medical services for all the people of Uttarakhand State. Main conditions of this agreement were as follows:

1. **PERIOD OF PARTNERSHIP**:
   (a) The agreement shall be for a period of 10 years, extendable for a further period of 10 years subject to the concurrence of both the parties.
   (b) It is also agreed that the development, management, and functioning of all the facilities and services here in provided shall be the responsibility of EMRI.
2. **THE OBJECTIVES OF THIS MEMORANDUM OF UNDERSTANDING ARE:**
   (a) The main objective of the Memorandum of Understanding between Government of Uttarakhand and Emergency Management and Research Institute, Secunderabad is to provide comprehensive emergency response services to the entire population of the State Uttarakhand.

(b) EMRI is already providing emergency response services in the States of Gujarat and Andhra Pradesh. These services are unique and of emergency nature. Against this background, pursuant to the above objective, and on broadly similar terms and conditions, the Government of Uttarakhand appoints the EMRI as the State Level Nodal Agency to operationalize the Emergency Response Services to the entire population of Uttarakhand and thereby improve the access to police, fire and health care services, particularly in emergency situation to pregnant women, neonates, parents of neonates, infants and children in situations of serious ill-health and all other health emergencies in the general population; and thereby assist the state to achieve the critical Millennium Development Goals in the health sector, i.e., reduction of infant Mortality Rate, and Maternal Mortality Rate, and in general improve, the confidence of the people through improving their ability to access emergency services.

(c) The Government of Uttarakhand shall provide for these services under the State Budget, National Rural Health Mission and other relevant schemes.

(d) Government of Uttarakhand envisages operationalization of 90 ambulances in a phased manner spread over a period of 12 months from signing of MOU and providing services on National and State Highways, urban and rural areas including pilgrimage routes of the State. Phase 1 covers identified urban areas (in Plains) and pilgrimage routes; Phase 2 covers rural areas with access to Roads/Hospitals and Phase 3 covers remote areas and hill terrains far from motorable access. Phase one shall be operationalized by 15th May, 2008.

(e) The scheme will ensure comprehensive emergency management (Medical, Police, Fire) using single number, training facilities and technology.

(f) The Government of Uttarakhand envisages the scheme to be run on a no-loss, no-profit basis. In future, keeping in mind the concerns of equity, efficiency and feasibility, the Government of Uttarakhand shall have the option of prescribing user charges to meet the operational expenses for these emergency response services.

(g) The Government of Uttarakhand and EMRI shall endeavour to ensure that the operations are open and transparent, strictly as per the requirement of project.

3. **RESPONSIBILITIES OF EMERGENCY MANAGEMENT AND RESEARCH INSTITUTE.**

The Emergency Management and Research Institute, Secunderabad shall carry out all the activities specified as follows:

1. Establish and operate an emergency response system in the State of Uttarakhand.

2. EMRI shall provide technological, leadership, administrative and managerial support as the Private Partner in an open and transparent manner to produce mutually agreed outcomes. The Application Software for the project will be brought by EMRI free of cost.

3. Serve as a vital emergency management information and assistance resource and raise societal awareness of, and capability in, Emergency Management and Response and thus save lives and reduce the economic impact to the citizens, firms and the government through appropriate awareness, education and capacity building programs.

4. Operate the ambulances and ensure that ambulance services are available on a 24 hours per day and 365 days a year basis to all the people in Uttarakhand, through the segment-wise operational headquarters established by Government of Uttarakhand where the ambulances will be located.

5. Provide the emergency health transportation services to all members of the public.

6. Recruit, position, and train required human resources, including pilots (drivers), and medically trained persons (Emergency Medical Technicians) who will be present in ever trip made by the ambulances while transporting an emergency case to a hospital.

7. Ensure that in every ambulance operated under this scheme, at least one pilot (driver) and one medically trained person shall be present at any given point of time to provide patient-stabilization, first-aid services, and other pre-hospital care during the emergency transportation.

8. Provide mutually agreed daily operation, monthly administrative & financial reports and quarterly fund utilization statements to the Government of Uttarakhand.

9. Attend periodical review meetings (physically or virtually) for the assessment of the operationalization of the scheme.

10. EMRI shall maintain separate financial accounts and records of its operations in Uttarakhand. These accounts shall be duly audited by a C.A. firm as approved by the Government of Uttarakhand and furnished to Government by first quarter of the succeeding year.

11. EMRI will make all attempts to attend every emergency call that is received. Based on its experience in other States, EMRI expects to manage approximately 600 emergencies per day after 2 years of implementation of the entire project.

12. EMRI will provide emergency response services on an average of 35 minutes in rural areas and 25 minutes in urban areas (in Plain areas) assuming to reach the nearest point of motorable access. Detailed service deliver parameters shall be approved later by the Advisory Council and EMRI shall abide by it. However, EMRI will also identify critical locations on various roads for connecting to hill terrains and remote areas with appropriate transportation vehicles. EMRI will also consider placing light weight stretchers in remote areas/Hill terrains.

13. EMRI shall bring in technology and service excellence and work towards improving delivery of emergency response to global standards over a period of time.

14. When required, EMRI shall assist the Government in Accreditation and such other matters from time to time.

15. Activities (workshops/seminars) as required for Governmental personnel and others.

16. Advance continuous improvement in emergency management through strategic partnerships, innovative programs, and collaborative policy positions.

17. Undertake applied research assignments in implementing emergency response in the field.

18. EMRI shall ensure that the cost of ambulances and other capital expenditures are at par and not in excess of comparative expenditures incurred in similar projects in Gujarat and Andhra Pradesh Taxes, as prevalent from time to time shall apply.

    Note: The Department of Health & Family Welfare, Government of Uttarakhand shall extend continuous support to the Emergency Management and Research Institute, Secunderabad for this project.

4. **THE DEPARTMENT OF HEALTH AND FAMILY WELFARE, GOVERNMENT OF UTTARAKHAND SHALL CARRY OUT ALL THE ACTIVITIES SPECIFIED AS FOLLOWS**:

1. Recognize EMRI as the State Level Nodal Agency to provide emergency response services across the state, in Public Private Partnership and in coordination with the public agencies, which will help drive greater transparency, agility, and better citizen service,

2. Entrust EMRI with the responsibility of operationalization of 90 ambulances over a period of 12 months from the date of signing MOU, as per agreed phases;

3. The purchase of 30 ambulances, for the first phase of the project, shall be done EMRI. Decision about the purchase of ambulance in the second and third phase shall be taken thereafter by the Advisory Council, in mutual consultation between the two parties.

4. Provide Ambulances, duly insured and equipped, as mutually agreed upon, to provide Emergency Health Transportation to the needy person requiring transportation and pre-hospital care and for this:-

    (a) To provide adequate funds as grant-in-aid, as required by EMRI, to equip ambulances which shall be designed by EMRI to suit public safety, patient care and patient relative/attendant care.

    (b) To allocate 15-20 acres of land for setting up emergency response center(s) to EMRI. The land will be given to EMRI on a leave and licence basis for execution of activities envisaged in this MOU;

5. To provide funds as grant-in-aid towards:

    (a) Capital expenditure for development of 15-20 acres of land earmarked by Government, construction of state of the art building, technology equipment furniture and fixtures and all other necessary office equipment, etc.

    (b) Operational expenditure (salaries, ambulance operational costs (fuel, maintenance, medical consumables, etc.), utilities (electricity, water and gas). Rent, telephone, recruitment, and administration in advance quarterly instalments before commencement of the quarter, and

    (c) Any other reasonable unforeseen expenses to be reimbursed at actual;

6. Provide furnished ambulance stations/Shelters, offices in segment headquarters;

7. To take up with the concerned authorities in the Health and Family Welfare Department to issue necessary instructions for making available required emergency medical facilities and strengthen the same in all the Primary Health Centres, Community Health Centres, Area Hospitals, District Hospitals and Teaching and other Specially Hospitals in the state that are run by the Government, as well as make all efforts to ensure the availability of medical and paramedical staff, equipment, medical supplies, and drugs for effective handling of emergencies to coordinate the better availability of healthcare services to the beneficiaries;

8. To undertake, to coordinate with the concerned authorities in the Police, Fire and other departments to issue appropriate instructions to the field officers of these departments for making available required assistance and resources to handle all emergencies efficiently by EMRI;

9. To undertake to provide appropriate protection to all the staff engaged in the provision of emergency health transport services;

10. To issue suitable administrative instructions to the field officers of all relevant departments in the government, so as to prevent compulsive use of the emergency health transportation service vehicles (ambulances) for any purposes

other than as described in this agreement, i.e. for transporting individuals in need of emergency healthcare services to the hospitals;

11. To liaise with various departments and agencies of the Central government to facilitate easy and early implementation of emergency response service (toll-free '108' and service providers), etc;

12. To establish or approve various training programs required for efficient emergency response (such as paramedical and emergency medical technician Courses) and thus establish new employment opportunities;

13. To promote research in academic institutions to improve emergency response;

14. To accredit various service providers such as hospitals and ambulances so that certain quality standards are met;

15. To promote public awareness in emergency response

16. To provide office space within the state as required by Emergency Management and Research Institute until permanent arrangements are made available; and

17. To set up an Advisory Council under the chairmanship of the Chief Secretary.

18. The council shall meet quarterly, the recommendations of which shall be mandatory. It will consist of the following:

(a) The Chief Secretary- Chairman

(b) Principal Secretary, Medical, Health and Family Welfare

(c) Principal Secretary, Finance

(d) Principal Secretary, Home

(e) Secretary Health-convener

(f) Director General of Health Services

(g) Four Nominees of CEO, EMRI

19. There shall be district level advisory committees under the district magistrates with Superintendent of Police and Chief Medical Officer as members. Two nominees of the CEO, EMRI shall also be members of this committee.

5. **DELIVERABLES:**

   (a) Estimated Capital Expenditure for this project is Rs 17.60 Crores and Estimated Operational Expenditure per year is Rs 16.59 Crores with 90 ambulances.

   (b) Project would be implemented over a period of 12 months, in a phased manner from the date of signing of the MOU and transferring of Rupees ten Crores as grant-in-aid for Capital and Operational expenditure (Rupees 5.00 crores on the date of signing MoU, Rupees 3.50 Crores in last week of March 08 and Rs 1.50 Crores in first week of May 08).

   (c) Transfer schedule of remaining capital and all the recurring expenditures shall be worked out in consultation between the two parties.

6. **EMRI shall**:

   (a) Provide Emergency Response Services (Medical, Police, Fire) to the entire population of Uttarakhand
   - With the Toll Free Number 108,
   - In Public Private Partnership and

   (b) Commit to bring Leadership, Training and Research, Technology and Innovation to provide high quality Emergency Services in Uttarakhand.

   (c) Confirm that
   - Contributes 5% of annual Operational Expenses.
   - The 24 hour Emergency Response Center would function in 3 shifts Operation.
   - The 24 hour Ambulances in the field would operate in 2 shifts

OBJECTIVE OF THE STUDY

1. Administrative/Operational Cost analysis of the services provided by EMRI operated 108 Ambulances.

2. Evaluation of Utility of services provided by EMRI operated 108 Ambulances for BPL and APL sections of the society.

3. Evaluation of the entire gamut of services being provided by 108 Ambulances.

4. Position of regular use/maintenance of the machines/appliances available in the 108 Ambulances.

5. Position of regular availability of staff in the 108 ambulances.

6. Analysis of operational cost utility/excess.

7. Comparative study of cost and operational expenditure of 108 Ambulances services vis-à-vis other states and analysis of National Rural Health Mission (NRHM) grant.

8. Evaluation of the work done by 108 Ambulances, its expenditure and facilities given by it to the beneficiaries in the light of MOU signed with the government of Uttarakhand

9. Difficulties/Suggestions of the beneficiaries of 108 Ambulances/its drivers/medical assistants/operating groups.

METHODOLOGY

UNIVERSE OF THE STUDY

For the Present Study, six districts viz, Nainital, Bageshwar, Udham Singh Nagar, Dehradun, Rudra prayag and Haridwar have been selected as the universe of the study as per the direction of the Planning Commission, Uttarakhand.

SAMPLING DESIGN

In each district 500 beneficiaries (300 delivery, 50 ambulance deliver, 50 road injury, 50 Heart related problem and 50 stomach and other related problems) were selected randomly from the list of the beneficiaries during the period 2009-10 to 2013-14. But, a total of 3,021 beneficiaries were selected from the sample districts. In addition, 30 Ambulances in the sample districts were selected randomly for their physical verification. The following Tables 1.1 and 1.2 show sampling design of the study:

Table 1.1

District wise Selection of the Beneficiaries According to their Problems:

S.No.	Districts	Women Delivery	Ambulance Delivery	Road Accidents	Heart Related Problems	Stomach and other Related Problems	Total No. of Beneficiaries Selected for Interview
1.	Nainital	301	50	50	50	50	501
2.	Bageshwar	306	50	50	50	50	506
3.	U.S.Nagar	300	50	50	50	50	500
4.	Dehradun	308	50	50	50	50	508
5.	Rudraprayag	304	50	50	50	50	504
6.	Haridwar	302	50	50	50	50	502
	Total	1821	300	300	300	300	3021

Table 1.2

District wise Selection of the 108 Ambulances:

S.No.	Name of the District	Total no. of Ambulances in the District	Selection of the Ambulances for Physical Verification
1.	Nainital	13	07
2.	Bageshwar	06	03
3.	U.S.Nagar	10	05
4.	Dehradun	16	08
5.	Rudraprayag	03	02
6.	Haridwar	10	05
	Total	58	30

District/block-wise name of the working staff in the sample ambulances, their mobile number (if available) has been given in the Annexure-2 of the report.

For the selection of the beneficiaries those blocks were selected that have the maximum number of beneficiaries of different categories as mentioned in Table 1.1. Secondly from the selected blocks those villages were selected that have the maximum number of beneficiaries of different groups. As district-wise list of beneficiaries was not available in the sample districts, the sample beneficiaries were selected according to the needs of study from different villages that were visited. Information related to various objectives of the study was obtained by establishing personal contact with the Health Department employees working in different blocks of sample districts. The sample public representatives from the sample districts were selected from among people who were aware of this scheme and who had knowledge about people who had been benefited from the scheme during the period under review. These public representatives had not only provided us assistance in the selection of beneficiaries but also provided us other information regarding the scheme. For details see Annexures-1, 3 and 4 of the report.

TOOLS FOR DATA COLLECTION

The primary and secondary data regarding this study were collected with the help of the following research tools developed according to the objectives of the study

1. Planning level pro-forma
2. District level pro-forma.
3. Interview Schedule for beneficiaries.
4. Open questions for discussion and policy formation with the Community leaders.
5. State level pro-forma EMRI staff.
6. Pro-forma for district level Health Officials.

In addition, the above research tools much information regarding the study were collected by physical verification of the EMRI Ambulances their equipment, materials and relevant records.

DATA ANALYSIS

The primary data regarding this study were analysed through computer according to the objectives of the study. The secondary data were processed by tabulating, classifying and arranging the material in coherent order and later were integrated at the appropriate places in the report. In Chapter-2, the socio-economic background of the sample beneficiaries of the sample districts has been discussed. Chapter-3 deals the physical condition of the sample ambulances and evaluation of presence and working of the employees working in them. Chapter-4 deals with Administrative Expenditure of the EMRI and Operational Expenditure of 108. Chapter-5 deals with Utility and Quality of EMRI Operated 108 Ambulances. The relative conclusions of the study objectives and recommendations are described in Chapter-6

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CHAPTER-2

Socio-Economic Back Ground of the Sample Beneficiaries of the Sample Districts

As a part of present study, information was collected from 3021 sample beneficiary respondents of the sample districts in regard to their socio-economic background. This chapter is devoted to an analysis of the information collected on different aspects as discussed below

RELIGION

Keeping in view the social set up of the universe of the study, the respondents have been divided into four major categories, i.e. Christians, Hindus, Muslims and Sikhs. Table 2.1 shows district-wise classification of sample beneficiary respondents according to their religion

Table 2.1

District-wise Classification of the Sample Beneficiary Respondents According to their Religion

District	Christians	%	Hindus	%	Muslims	%	Sikhs	%	Total
Bageshwar	-	-	492	97.23	13	2.57	1	0.20	506
Dehradun	5	0.98	467	91.93	30	5.91	6	1.18	508
Haridwar	2	0.40	319	63.55	177	35.26	4	0.80	502
Nainital	-	-	477	95.21	19	3.79	5	1.00	501
Rudraprayag	-	-	501	99.40	2	0.40	1	0.20	504
U.S. Nagar	1	0.20	412	82.40	64	12.80	23	4.60	500
Total	8	0.26	2668	88.32	305	10.10	40	1.32	3021

Table 2.1 shows that out of a total of 3021 sample beneficiary respondents, 2668(88.32%) were Hindus, 40(1.32%) were Sikhs, 305(10.10%) were Muslims and the remaining 8(0.26%) were Christians.

CASTE

Caste is another important variable of social profile and a major determinant of social status especially in Indian society. Thus, on this basis, the sample beneficiary respondents have been divided into four categories, i.e. General Castes, Backward Castes (OBCs), Scheduled Castes (SCs) and Scheduled Tribes (STs). Table 2.2 shows district-wise classification of sample beneficiary respondents according to their castes.

Table 2.2

District-wise Classification of the Sample Beneficiary Respondents According to their Castes

District	General Castes	%	OBCs	%	SCs	%	STs	%	Total
Bageshwar	321	65.24	-	-	170	34.55	1	0.20	492
Dehradun	233	49.89	149	31.91	76	16.27	9	1.93	467
Haridwar	46	14.42	146	45.77	104	32.60	23	7.21	319
Nainital	234	49.06	30	6.29	110	23.06	103	21.59	477
Rudraprayag	387	77.25	-	-	114	22.75	-	-	501
U.S. Nagar	245	59.47	6	1.46	160	38.83	1	0.24	412
Total	1466	54.95	331	12.41	734	27.51	137	5.13	2668

Table 2.2 shows that out of a total of 2668 sample Hindu beneficiary respondents, 1466(54.95%) belonged to General Castes, 331(12.41%) were OBCs, 734(27.51%) SCs and the remaining 137(5.13%) were STs.

Age Group

Information was collected from the sample beneficiary respondents of the sample districts regarding their age. The sample beneficiaries were distributed between Child (those falling below the age of 18 years); Young (those falling in the age range of 18 to 35 years); Middle aged (those falling in the age range of 36 to 55 years): Old (those having cross the age of 55 years). Table 2.3 shows age group of the sample beneficiary respondents of the sample districts according to this classification.

Table 2.3

District-wise Classification of the Sample Beneficiary Respondents According to their Age Group

District	Below 18 Years	%	18-35 Years	%	36-55 Years	%	Above 55 Years	%	Total
Bageshwar	1	0.20	386	76.28	82	16.21	37	7.31	506
Dehradun	7	1.38	386	75.98	85	16.73	30	5.91	508
Haridwar	3	0.60	359	71.51	96	19.12	44	8.76	502
Nainital	1	0.20	401	80.04	86	17.17	13	2.59	501
Rudraprayag	1	0.20	413	81.94	50	9.92	40	7.94	504
U.S. Nagar	1	0.20	377	75.40	115	23.00	7	1.40	500
Total	14	0.46	2322	76.86	514	17.01	171	5.66	3021

Table 2.3 shows that out of a total of 3021 sample beneficiary respondents, 2322(76.86%) were young (those falling in the age range of 18 to 35 years), 514(17.01%) were middle aged (those falling in the age range of 36 to 55 years), 171(5.66%) were old (those having cross the age of 55 years) and the remaining 14(0.46%) were child (those falling below the age of 18 years).

EDUCATIONAL QUALIFICATION

On the basis of educational attainment, sample beneficiary respondents are classified into six broad categories, i.e. Graduate, Post Graduate, Intermediate, High School, Primary and uneducated. Table 2.4 shows district-wise classification of the sample beneficiary respondents according to their educational qualifications.

Table 2.4
District-wise Classification of the Sample Beneficiary Respondents According to their Educational Qualifications

District	Uneducated	%	Primary	%	High School	%	Inter	%	Graduate	%	Post Graduate	%	Total
Bageshwar	88	17.39	208	41.11	142	28.06	53	10.47	15	2.96	-	-	506
Dehradun	111	21.85	149	29.33	121	23.82	74	14.57	50	9.84	3	0.59	508
Haridwar	142	28.29	137	27.29	120	23.90	51	10.16	52	10.36	-	-	502
Nainital	29	5.79	281	56.09	133	26.55	35	6.99	22	4.39	1	0.20	501
Rudraprayag	145	28.77	221	43.85	84	16.67	25	4.96	24	4.76	5	0.99	504
U.S. Nagar	45	9.00	222	44.40	110	22.00	63	12.60	58	11.60	2	0.40	500
Total	560	18.54	1218	40.32	710	23.50	301	9.96	221	7.32	11	0.36	3021

Table 2.4 shows that out of a total of 3021 sample beneficiary respondents, 1218(40.32%) were educated up to Primary level, 710(23.50%) High School level, 301(9.96%) Intermediate level, 221(7.32%) were Graduate, 11(0.36%) were Post Graduate and remaining 560(18.54%) were uneducated.

ECONOMIC STATUS

The economic status of the sample beneficiary respondents can be measured on the basis of the poverty line decided by the planning commission. The economic status of the sample beneficiary respondents has been shown in Table 2.5

Table 2.5
District-wise Classification of the Sample Beneficiary Respondents According to their Economic Status

District	APL category	%	BPL category	%	Total
Bageshwar	212	41.90	294	58.10	506
Dehradun	265	52.17	243	47.83	508
Haridwar	235	46.81	267	53.19	502
Nainital	310	61.88	191	38.12	501
Rudraprayag	312	61.90	192	38.10	504
U.S. Nagar	196	39.20	304	60.80	500
Total	1530	50.65	1491	49.35	3021

Table 2.5 shows that out of a total of 3021 sample beneficiary respondents, 1530(50.65%) were above the poverty line and the remaining 1491(49.35%) were below the poverty line.

FAMILY SIZE

The family size of the sample beneficiary respondents has been shown in Table 2.6.

Table 2.6

District-wise Classification of the Sample Beneficiary Respondents According to their Family Size

District	Up to 3 members	%	4 to 5 Members	%	6 to 8 Members	%	Above 9 Members	%	Total
Bageshwar	91	17.98	322	63.64	93	18.38	-	-	506
Dehradun	66	12.99	275	54.13	147	28.94	20	3.94	508
Haridwar	91	18.13	237	47.21	129	25.70	45	8.96	502
Nainital	55	10.98	314	62.67	108	21.56	24	4.79	501
Rudraprayag	74	14.68	403	79.96	26	5.16	1	0.20	504
U.S. Nagar	50	10.00	299	59.80	138	27.60	13	2.60	500
Total	**427**	**14.13**	**1850**	**61.24**	**641**	**21.22**	**103**	**3.41**	**3021**

Table 2.6 shows that out of a total of 3021 sample beneficiary respondents, 1850(61.24%) had 4 to 5 family members, 641(21.22%) had 6 to 8 members, 427(14.13%) had up to 3 members and the remaining 103(3.41%) had above 9 members.

CHILDREN IN THE FAMILY

Table 2.7 shows number of children of the sample beneficiary respondents of the sample districts.

Table 2.7

District-wise Classification of the Sample Beneficiary Respondents According to their Children in the Family

District	1 Child	%	2 Children	%	3 Children	%	4 Children	%	5 Children	%	Above 5 children	%	Total
Bageshwar	100	19.76	147	29.05	204	40.32	55	10.87	-	-	-	-	506
Dehradun	72	14.17	177	34.84	158	31.10	54	10.63	27	5.31	20	3.94	508
Haridwar	66	13.15	177	35.26	125	24.90	65	12.95	30	5.98	39	7.77	502
Nainital	100	19.96	226	45.11	93	18.56	66	13.17	9	1.80	7	1.40	501
Rudraprayag	68	13.49	206	40.87	209	41.47	19	3.77	1	0.20	1	0.20	504
U.S. Nagar	57	11.40	230	46.00	116	23.20	79	15.80	15	3.00	3	0.60	500
Total	**463**	**15.33**	**1163**	**38.50**	**905**	**29.96**	**338**	**11.19**	**82**	**2.71**	**70**	**2.32**	**3021**

Table 2.7 shows that out of a total of 3021 sample beneficiary respondents, 1163(38.50%) had 2 children in their families, 905(29.96%) had 3 children, 463(15.33%) had only one child, 338(11.19%) had 4 children, 82(2.71%) had 5 children and the remaining 70(2.32%) had above 5 children in their families.

TYPE OF STRUCTURE OF DWELLINGS

Table 2.8 shows type of structure of dwellings of 3021 sample beneficiary respondents of the sample districts.

Table 2.8

District-wise Classification of the Sample Beneficiary Respondents According to Type of Structure of their Dwellings

District	Kutcha	%	Pucca	%	Total
Bageshwar	-	-	506	100.00	506
Dehradun	9	1.77	499	98.23	508
Haridwar	13	2.59	489	97.41	502
Nainital	-	-	501	100.00	501
Rudraprayag	-	-	504	100.00	504
U.S. Nagar	-	-	500	100.00	500
Total	22	0.73	2999	99.27	3021

Table 2.8 shows that out of a total of 3021 sample beneficiary respondents, 2999(99.27%) had Pucca dwellings and the remaining 22(0.73%) had Kutcha structure of dwellings.

AVAILABILITY OF ELECTRICITY IN DWELLINGS

During the field Investigation information was collected from the sample beneficiary respondents of the sample districts about availability of electricity in their dwellings. On the basis of the information provided by them the availability of electricity in the dwellings of the sample beneficiary respondents has been shown in Table 2.9.

Table 2.9

District-wise Classification of the Sample Beneficiary Respondents According to Availability of Electricity in their Dwellings

District	Not available	%	Available	%	Total
Bageshwar	-	-	506	100	506
Dehradun	1	0.20	507	99.80	508
Haridwar	15	2.99	487	97.01	502
Nainital	-	-	501	100	501
Rudraprayag	-	-	504	100	504
U.S. Nagar	-	-	500	100	500
Total	16	0.53	3005	99.47	3021

Table 2.9 shows that out of a total of 3021 sample beneficiary respondents, 3005(99.47%) had electricity in their dwellings and the remaining 16(0.53%) had no electricity in their dwellings.

AVAILABILTY OF TOILETS IN THE DWELLINGS

Table 2.10 shows availability of toilets in the dwellings of the sample beneficiary respondents of the sample districts

Table 2.10

District-wise Classification of the Sample Beneficiary Respondents According to availability of Toilets in their Dwellings

District	Not available	%	Available	%	Total
Bageshwar	-	-	506	100	506
Dehradun	3	0.59	505	99.41	508
Haridwar	15	2.99	487	97.01	502
Nainital	-	-	501	100	501
Rudraprayag	-	-	504	100	504
U.S. Nagar	-	-	500	100	500
Total	18	0.60	3003	99.40	3021

Table 2.10 shows that out of a total of 3021 sample beneficiary respondents, 3003(99.40%) had toilets in their dwellings and the remaining 18(0.60%) had no toilets in their dwellings.

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CHAPTER-3

Physical Condition of 108 Ambulances and Evaluation of Presence and Working of the Employees Working in them

During survey, the physical condition and quality of the sample 108 ambulances was assessed on the basis of the physical inspection. Information was also collected from the employees working in the sample ambulances regarding their qualifications and training acquired by them and difficulties faced by them. An appraisal of this is given below.

Details Regarding Number of Employees and their Posts

On the basis of physical inspection, details collected regarding physical aspects of the 108 sample ambulances present in the sample districts and employees working in them on different posts. The same information has been shown in Table 3.1.

Table 3.1

District-wise Classification of the Sample Ambulances Present in the Sample Districts According to Number and Post of Employees Working in them

District	Driver	EMT	Total
Bageshwar	3	3	6
Dehradun	8	8	16
Haridwar	5	5	10
Nainital	7	7	14
Rudraprayag	2	2	4
U.S. Nagar	5	5	10
Total	30	30	60

From Table 3.1, it is clear that both drivers and EMTs were found working in the sample ambulances during the physical inspection.

Level of Education of the Working Employees

During survey, information was compiled regarding the education of employees working in the sample ambulances of the sample districts. The level of education of the drivers and EMTs has been shown in Tables 3.2 (a) and 3.2(b).

Table 3.2 (a)

District-wise Classification of the EMTs Working in the sample Ambulances According to their Level of Education

District	D. Pharma	Graduate	Total
Bageshwar	3	-	3
Dehradun	7	1	8
Haridwar	3	2	5
Nainital	7	-	7
Rudraprayag	2	-	2
U.S. Nagar	5	-	5
Total	27	3	30

From the aforesaid Table 3.2(a) it is clear that out of a total 30 EMTs, 27 EMTs had a D.Pharma degree and the remaining 3 had an education qualification of graduate level only.

Table 3.2(b)

District-wise Classification of the Drivers Working in the sample Ambulances According to their Level of Education

District	High School	Inter	Graduate	Total
Bageshwar	-	3	-	3
Dehradun	4	4	-	8
Haridwar	4	1	-	5
Nainital	2	4	1	7
Rudraprayag	2	-	-	2
U.S. Nagar	4	1	-	5
Total	16	13	1	30

From the aforesaid Table 3.2(b) it is clear that out of a total of 30 drivers, 16 had qualification of high school level, 13 had done intermediate and the remaining 1 was graduate.

Period of Service of the Employees in 108 Ambulances

During survey, the employees working in the sample ambulances of the sample districts were asked as to since when they had been working in 108 ambulances. The period of service according to information provided by them has been shown in Tables 3.3(a) and 3.3(b).

Table 3.3(a)

District-wise Classification of the EMTs Working in the Sample Ambulances According to Period of their Service in the Ambulances

District	Total	Less than one Year	Since One Year	Since Three Years	Since Four Years	Since Five Years	Since Six Years	Since Seven Years
Bageshwar	3	1	-	-	-	1	-	1
Dehradun	8	-	-	1	2	-	1	4
Haridwar	5	-	1	2	1	-	1	-
Nainital	7	-	2	-	-	2	-	3
Rudraprayag	2	-	-	1	-	-	-	1
U.S. Nagar	5	-	1	3	-	-	-	1
Total	30	1	4	7	3	3	2	10

From Table 3.3(a), it is clear that out of a total 30 EMTs, 1 was working since less than one year, 4 since last one year, 7 since last three years, 3 since last four years, 3 since last five years, 2 since last six years and remaining 10 since last seven years.

Table 3.3(b)

District-wise Classification of the Drivers Working in the Sample Ambulances According to Period of their Service in the Ambulances

District	Total EMT	Less than One Year	Since One year	Since Two Years	Since Three Years	Since Four Years	Since Five Years	Since Seven Years	Since Eight Years
Bageshwar	3	1	-	-	-	-	1	-	1
Dehradun	8	-	1	-	2	2	1	2	-
Haridwar	5	-	1	2	-	1	1	-	-
Nainital	7	-	1	-	1	1	2	2	-
Rudraprayag	2	-	-	2	-	-	-	-	-
U.S. Nagar	5	-	2	-	2	-	-	1	-
Total	30	1	5	4	5	4	5	5	1

From Table 3.3(b), it is clear that out of a total 30 drivers, 1 was working since less than one year, 5 since last one year, 4 since last two years, 5 since last three years, 4 since last four years, 5 since last five years, 5 since last seven years and the remaining 1 since last eight years.

Evaluation of the Physical Condition of Sample Ambulances

During survey, the drivers and EMTs working in the sample ambulances were asked about the Physical condition of the ambulances in which they have been working. All the employees of the sample ambulances considered the physical condition of the ambulances as normal and they were of the opinion that most of the ambulances have been purchased about 6 to 7 years back and since then they have been working.

Kind of Training given to the EMTs

During survey, the EMTs working in the sample ambulances were asked whether some training was given to them to increase their efficiency during the previous years. And if so, what sort of training they received during training. The information regarding training of the EMTs on the basis of information provided by them has been shown in Table 3.4.

Table 3.4

District-wise Classification of the Sample EMTs According to Type of Training they Received

District	Total EMT	BLS + ITLS	%	BLS + ITLS + ALS	%	BLS + ITLS + BLSO	%	BLS+ ALS+ BLSO	%	ISLS	%	ITLS	%
Bageshwar	3	1	33.33	2	66.67	-	-	-	-	-	-	-	-
Dehradun	8	-	-	5	62.50	2	25.00	-	-	1	12.50	-	-
Haridwar	5	2	40.00	-	-	-	-	-	-	2	40.00	1	20.00
Nainital	7	1	14.29	2	28.57	1	14.29	2	28.57	-	-	1	14.29
Rudraprayag	2	-	-	-	-	1	50.00	1	50.00	-	-	-	-
U.S. Nagar	5	1	20.00	4	80.00	-	-	-	-	-	-	-	-
Total	30	5	16.67	13	43.33	4	13.33	3	10.00	3	10.00	2	6.66

1. DLS – Dynamic Light Scattering
2. ITLS – International Trauma Life Support
3. BLSO – Basic Life Support in Obstetrics
4. ISLS – International Society of the Learning Science

Table 3.4 shows that out of a total of 30 EMTs, 13(43.33%) had received training of BLS plus ITLS plus ALS level, 5(16.67%) training of BLS plus ITLS level, 4(13.33%) training of BLS plus ITLS plus BLSO level, 3(10%) of BLS plus ALS plus BLSO level, 3(10%) training of ISLS level and the remaining 2(6.67%) had received training of ITLS level.

Period of Training

During survey, efforts were made to find out the period of training received by the EMTs working in the sample ambulances. The period of their training on the basis of information provided by them has been shown in Table 3.5.

Table 3.5

District-wise Classification of the Sample EMTs According to their Period of Training

District	Total EMT	5 days	6-10 days	11-15 days	16-20 days	20-30 days	2 Months	3 Months	6 Months
Bageshwar	3	1	-	1	-	1	-	-	-
Dehradun	8	1	1	2	1	1	2	-	-
Haridwar	5	-	-	-	-	1	3	1	-
Nainital	7	-	-	-	-	-	3	3	1
Rudraprayag	2	-	-	1	-	-	1	-	-
U.S. Nagar	5	-	-	1	1	1	2	-	-
Total	30	2	1	5	2	4	11	4	1

From Table 3.5 it is clear that out of a total of 30 EMTs, 4 had received a training of three months, 1 received training for a period of six months, 11 for two months the remaining 14 had received training for the period from 5 to 30 days.

Place of Training

During survey, efforts were made to know about the place of training of the EMTs working in the sample ambulances. The place of their training on the basis of information provided by them has been shown in Table 3.6.

Table 3.6

District-wise Classification of the Sample EMTs According to their Place of Training

District	Total EMT	Dehradun	%	Dehradun & Hyderabad	%	Hyderabad	%	Work place	%
Bageshwar	3	1	33.33	2	66.67	-	-	-	-
Dehradun	8	4	50.00	3	37.50	1	12.50	-	-
Haridwar	5	2	40.00	1	20.00	1	20.00	1	20.00
Nainital	7	5	71.43	2	28.57	-	-	-	-
Rudraprayag	2	-	-	2	100.00	-	-	-	-
U.S. Nagar	5	2	40.00	3	60.00	-	-	-	-
Total	30	14	46.67	13	43.33	2	6.67	1	3.33

From Table 3.6 it is clear that out of a total of 30 EMTs, 14(46.67%) EMTs had received training in Dehradun, 13(43.33%) in Dehradun and Hyderabad, 2(6.67%) only in Hyderabad and the remaining 1(3.33%) had received training in his/her work place itself.

Number of Daily Calls received by the Sample Ambulances

During survey, information regarding the number of average daily calls received by the drivers and EMTs working in the sample ambulances was collected. The number of calls received by the employees of the sample ambulances on the basis of information provided by them has been shown in Table 3.7.

Table 3.7

District-wise Classification of the Sample Ambulances According to Number of Daily Calls Received by them

District	Total Sample Ambulances	1-5 Calls	%	6-10 Calls	%	11-15 Calls	%	16-20 Calls	%
Bageshwar	3	1	33.33	2	66.67	-	-	-	-
Dehradun	8	1	12.50	6	75.00	1	12.50	-	-
Haridwar	5	-	-	3	60.00	1	20.00	1	20.00
Nainital	7	5	71.43	2	28.57	-	-	-	-
Rudraprayag	2	1	50.00	1	50.00	-	-	-	-
U.S. Nagar	5	-	-	2	40.00	2	40.00	1	20.00
Total	30	8	26.67	16	53.33	4	13.33	2	6.67

From Table 3.7 it is clear that out of a total of 30 ambulances, 16(53.33%) ambulances received every day 6 to 10 calls, 8(26.67%) from 1 to 5 calls, 4(13.33%) from 11 to 15 calls and the remaining 2(6.67%) received every day from 16 to 20 calls.

Distance Covered by the Ambulances Every Day

During survey, the employees working in the sample ambulances were asked as to how much average distances in Kilo Meter was covered every day by their ambulances. The distance covered by the sample ambulances every day on the basis of information provided by them has been shown in Table 3.8.

Table 3.8

District-wise Classification of the Sample Ambulances According to Distance Covered by them Every Day

District	Total Sample Ambulance	76-100 Km	%	101-150 Km	%	151-175 Km	%	176-200 Km	%	201-250 Km	%
Bageshwar	3	1	33.33	2	66.67	-	-	-	-	-	-
Dehradun	8	-	-	5	62.50	1	12.50	2	25.00	-	-
Haridwar	5	-	-	3	60.00	-	-	-	-	2	40.00
Nainital	7	-	-	5	71.43	-	-	1	14.29	1	14.29
Rudraprayag	2	-	-	-	-	1	50.00	-	-	1	50.00
U.S. Nagar	5	-	-	1	20.00	-	-	4	80.00	-	-
Total	30	1	3.33	16	53.33	2	6.67	7	23.33	4	13.33

From Table 3.8 it is clear that out of a total of 30 ambulances, 16(53.33%) ambulances covered a distance from 101 to 150 km every day, 7(23.33%) covered from 176 to 200 km, 4(13.33%) covered a distance from 201 to 250 km, 2(6.67%) a distance from 151 to 175 km and the remaining 1(3.33%) covered a distance from 76 to 100 km per day.

Distance Covered by the Ambulance per litre Diesel

During survey, the drivers working in the sample ambulances were asked as to how much distance is covered by their ambulances in one litre diesel. The average distance covered by the sample ambulances in one litre diesel on the basis of information provided by them has been shown in Table 3.9.

Table 3.9

District-wise Classification of the Sample Ambulances According to Distance Covered Per Liter Diesel

District	Total Ambulance	8 km	9-12 km
Bageshwar	3	2	1
Dehradun	8	1	7
Haridwar	5	1	4
Nainital	7	3	4
Rudraprayag	2	2	-
U.S. Nagar	5	-	5
Total	30	9	21

From Table 4.10, it is clear that out of a total of 30 ambulances, 21 ambulances covered a distance of 9 to 12 km in one liter diesel and the remaining 9 covered 8 km distance from one liter diesel.

Consumption of Diesel Per Month Per Ambulance

During survey, the drivers working in the sample ambulances were asked about the quantity of consumption of diesel per month per ambulance according to their estimation. Consumption of diesel per month by sample ambulances on the information provided by them has been shown in Table 3.10.

Table 3.10

District-wise Classification of the Sample Ambulances According to Quantity of Diesel Consumed Every Month by them

District	Total Sample Ambulance	6000 to 6500 Liter	%	4000 to 5500 Liter	%	3000 to 3600 Liter	%
Bageshwar	3	-	-	2	66.67	1	33.33
Dehradun	8	2	25.00	2	25.00	4	50.00
Haridwar	5	3	60.00	2	40.00		-
Nainital	7	2	28.57	3	42.86	2	28.57
Rudraprayag	2	-	-	2	100.00	-	-
U.S. Nagar	5	-	-	2	40.00	3	60.00
Total	30	7	23.33	13	43.33	10	33.33

From Table 3.10, it is clear that out of a total of 30 sample ambulances, 13(43.33%) had a per month consumption of diesel from 4,000 to 5,500 liters, 10(33.33%) from 3,000 to 3,600 liters and the remaining 7(23.33%) had a per month consumption of diesel from 6,000 to 6,500 liters.

Time taken by the Ambulances to Reach the Beneficiaries

During survey, the employees working in the sample ambulances were asked as to after how much time they reached the beneficiaries after receiving calls from them.

Table 3.11

District-wise Classification of the Sample Ambulances According to Time taken by them to Reach the Beneficiary

District	Total Sample Ambulance	5-10 Minutes	%	10-20 Minutes	%	20-30 Minutes	%	30-40 Minutes	%	Above 50 Minutes	%
Bageshwar	3	-	-	-	-	1	33.33	2	66.67	-	-
Dehradun	8	1	12.50	4	50.00	3	37.50	-	-	-	-
Haridwar	5	-	-	1	20.00	4	80.00	-	-	-	-
Nainital	7	1	14.29	1	14.29	3	42.86	2	28.57	-	-
Rudraprayag	2	-	-	-	-	-	-	2	100.00	-	-
U.S. Nagar	5	-	-	-	-	3	60.00	1	20.00	1	20.00
Total	30	2	6.67	6	20.00	14	46.67	7	23.33	1	3.33

From Table 3.11, it is clear that out of a total of 30 sample ambulances, 14(46.67%) ambulances took time from 20 to 30 minutes, 7(23.33%) from 30 to 40 minutes, 6(20%) from 10 to 20 minutes, 2(6.67%) from 5 to 10 minutes and the remaining 1(3.33%) took more than 50 minutes to reach the beneficiaries.

Effect on the Service when the Ambulance is out of order

During survey, the employees working in the sample ambulances were asked whether the ambulances in which they worked were out of order at any point of time. The number of sample ambulances running out of order on the basis of information provided by them has been shown in Table 3.12.

Table 3.12

District-wise Classification of the Sample Ambulances According to their Running Out of Order

District	Total Sample Ambulances	Yes	%	No	%
Bageshwar	3	2	66.67	1	33.33
Dehradun	8	8	100.00	-	-
Haridwar	5	5	100.00	-	-
Nainital	7	2	28.57	5	71.43
Rudraprayag	2	2	100.00	-	-
U.S. Nagar	5	3	60.00	2	40.00
Total	30	22	73.33	8	26.67

From Table 3.12, it is clear that out of a total of 30 sample ambulances, 22(73.33%) ambulances had gone out of order and the remaining 8(26.67%) had not gone out of order.

Gender of EMTs Working in the Sample Ambulances

During survey, the information regarding the gender of the EMTs working in the sample ambulances were compiled which has been shown in following Tables.

Table 3.13

District-wise Classification of the Sample Ambulances on the basis of Gender of the EMTs

District	Total EMT in the Sample Ambulance	Female	%	Male	%
Bageshwar	3	-	-	3	100.00
Dehradun	8	-	-	8	100.00
Haridwar	5	-	-	5	100.00
Nainital	7	2	28.57	5	71.43
Rudraprayag	2	-	-	2	100.00
U.S. Nagar	5	1	20.00	4	80.00
Total	**30**	**3**	**10.00**	**27**	**90.00**

From Table 3.13, it is clear that out of a total of 30 sample ambulances, in 27(90%) ambulance there was male EMTs and the remaining 3(10%) there was female EMTs.

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CHAPTER-4

Administrative Expenditure of the EMRI and Operational Expenditure of 108 Ambulances

The administrative expenditure of the EMRI and operational expenditure of the 108 ambulances has been calculated on the basis of the Audited Statements of Accounts received from EMRI Dehradun office. During the period from 2008-09 to 2017-18, administrative expenditure and operational expenditure of 108 ambulances has been discussed in the following Tables.

Analysis of Administrative and Operational Expenditure

During the period 2008-09 to 2017-18, the operational and administrative expenditure of EMRI has been shown in table 4.1.

Table 4.1

During the Period 2008-09 to 2017-18 Operational and Administrative Expenditure of the EMRI (in Rs.)

Year	Operational Expenditure	Administrative Expenditure	Percentage of Administrative Expenditure out of Operational Expenditure
2008-09	92855622.58	6594538.98	7.10%
2009-10	125668835.64	7751051.44	6.17%
2010-11	150997810	10688692.31	7.08%
2011-12	175803437.97	16851410.03	9.59%
2012-13	188335051.68	13218631.78	7.02%
2013-14	204196274	11323361	5.55%
2014-15	212743313	11280757	5.30%
2015-16	220284748	10253071	4.65%
2016-17	213287515	7939933	3.72%
2017-18	189093459	5395838	2.85%
Total	**1773266067**	**101297284.5**	**5.71%**

Source: EMRI audited statements of accounts.

It is clear from Table 4.1 that from the year 2008-09 to the year 2013-14, the percentage of administrative expenditure out of operational expenditure of EMRIs was between 5.55 and 9.59 per cent, maximum 9.59 per cent in the year 2011-12 and minimum 5.55 percent in the year 2013-14. If the administrative expenditure was calculated against operational expenditure from the year 2008-09 to 2017-18, it was between 2.85 and 9.59 per cent, maximum 9.59 per cent in the year 2011-12 and minimum 2.85 per cent in the

year 2017. If average administrative expenditure was calculated in the said 10 years, then it was 5.9 percent of the operational expenditure.

Head-wise Administrative Expenditure

In the following Tables 4.2(a) and 4.2(b), head-wise administrative expenditure of the EMRI during the period 2008-09 to 2017-18 has been shown.

Table 4.2(a)

From the year 2008-09 to 2014-15, Head-wise Administrative Expenditure of the EMRI (in Rs.)

Items	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Carriage Inward	6122 (0.09%)	34533 (0.45%)	17015 (0.16%)	-	-	-	-
Staff Insurance Expenses	820923 (12.45%)	-	2007029 (18.78%)	4264972 (25.31%)	1936696 (14.65%)	279434 (2.47%)	1570730 (13.92%)
Packing Material Expenses	33771 (0.51%)	54740 (0.71%)	58490 (0.55%)	-	-	-	-
Meeting Expenses-Government Board	26630 (0.40%)	45160 (0.58%)		-	-	-	9545 (0.08%)
Rounding Off	-	-	666.67 (0.01%)	37.46 (0.00%)	153.24 (0.00%)	933.22 (0.01%)	2945.68 (0.03%)
Insurance Premium General	231174 (3.51%)	5960 (0.08%)	-	-	-	1839945.50 (16.25%)	621946.50 (5.51%)
Printing of PCR Books	15125 (0.23%)	214680 (2.77%)	160739 (1.50%)	152033 (0.90%)	262035 (1.98%)	318934 (2.82%)	350660 (3.11%)
Staff Welfare Expenses	550339.50 (8.35%)	438048.30 (5.65%)	717005.82 (6.71%)	1143743.47 (6.79%)	1506612 (11.40%)	1238939.50 (10.94%)	988420.62 (8.76%)
News Paper Advertisement	-	106456 (1.37%)	11434 (0.11%)	114549 (0.68%)	10632 (0.08%)	-	-
Housekeeping	381873.64 (5.79%)	539587 (6.96%)	953040.90 (8.92%)	909686.09 (5.40%)	750272 (5.68%)	637576 (5.63%)	673274 (5.97%)
Data Entry Charges-PCR Forms	-	-	155628 (1.46%)	550650.94 (3.27%)	138168.65 (1.05%)	136463.61 (1.21%)	127900 (1.13%)
Staff Recruitment Expenses	540308.80 (8.19%)	276844 (3.57%)	506309 (4.74%)	830410 (4.93%)	42925 (0.32%)	124514 (1.10%)	79809 (0.71%)
Staff Relocation Expenses	298800 (4.53%)	15300 (0.20%)	-	-	-	-	-
Electricity Charges	556397.32 (8.44%)	760626.76 (9.81%)	807494.76 (7.55%)	1080508.02 (6.41%)	1956469.74 (14.80%)	1611023.66 (14.23%)	1541297.34 (13.66%)
Consultancy Charges	-	20000 (0.26%)	71243 (0.67%)	228139 (1.35%)	111200 (0.84%)	-	90170 (0.80%)
Water Charges	120120.97 (1.82%)	14019 (0.18%)	-	-	-	-	-
Professional Charges	-	10590 (0.14%)	8200 (0.08%)	71609 (0.42%)	67416 (0.51%)	-	67820 (0.60)
Carriage Outward	88890 (1.35%)	828998.50 (10.70%)	921124 (8.62%)	369893 (2.20%)	445612 (3.37%)	495673.08 (4.38%)	-
Postage & Courier Charges	124132 (1.88%)	250408 (3.23%)	621369.68 (5.81%)	264624 (1.57%)	297936 (2.25%)	272316 (2.40%)	262421 (2.33%)
Printing & Stationery	418032.16 (6.34%)	1149871.92 (14.84%)	1126138.62 (10.54%)	1149873.32 (6.82%)	1159462.39 (8.77%)	824671.79 (7.28%)	1105362.32 (9.80%)

Items	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
News Papers & Periodicals	42346 (0.64%)	109201.04 (1.41%)	123788 (1.16%)	135048.50 (0.80%)	171585 (1.30%)	159280 (1.41%)	181420 (1.61%)
Diesel Expenses on Generator	24060 (0.36%)	33288 (0.43%)	8114 (0.08%)	604784.04 (3.59%)	614020 (4.65%)	480307 (4.24%)	532223 (4.72%)
Medical Reimbursement	-	11084 (0.14%)	75597 (0.71%)	-	-	-	-
Office Expenses	332195.25 (5.04%)	385524.09 (4.97%)	118330.19 (1.11%)	310516.78 (1.84%)	403618.07 (3.05%)	30859.14 (0.27%)	17191.20 (0.15%)
Garden Maintenance	4500 (0.07%)	-	-	15547.36 (0.09%)	38777.34 (0.29%)	34658.17 (0.31%)	42916 (0.38%)
Guest House Maintenance	3324 (0.05%)	28776 (0.37%)	32409 (0.30%)	-	-	-	-
Security Charges	689251.33 (10.45%)	462754 (5.97%)	651126 (6.09%)	1128077.64 6.69%	947903 (7.17%)	990505 (8.75%)	1201305 (10.65%)
Octroi Charges	-	1300 (0.02%)	-	-	-	-	-
Internet Expenses	635047.56 (9.63%)	946253.77 (12.21%)	261070.88 (2.44%)	788522 (4.68%)	263133.10 (1.99%)	392847.95 (3.47%)	466110.69 (4.13%)
Telephone Landlines	604233 (9.16%)	946746.18 (12.21)	1232839.47 (11.53%)	1946696.19 (11.55%)	1899000.12 (14.37%)	-	-
Internal Audit	-	-	8929 (0.08%)	-	-	130022 (1.15%)	164905 (1.46%)
Legal Charges	15420 (0.23%)	43000 (0.55%)	16158 (0.15%)	109758 (0.65%)	32303 (0.24%)	32549 (0.29%)	1006 (0.01%)
Man Power Consultancy Services	-	-	-	666379.95 (3.95%)	138408 (1.05%)	894416.41 (7.90%)	805105 (7.14%)
Misc. Expenses	375 (0.01%)	-	-	3305 (0.02%)	-	-	-
Bank Charges	23861 (0.36%)	17301.88 (0.22%)	17312.32 (0.16%)	12121.19 (0.07%)	15438.13 (0.12%)	10899 (0.10%)	16506.50 (0.15%)
Interest paid Others	7286 (0.11%)	-	91 (0.00%)	-	8856 (0.07%)	8 (0.00%)	28402 (0.25%)
Tender & Bid Expenses	-	-	-	-	-	386585 (3.41%)	331365 (2.94%)
Total	**6594539**	**7751051.44**	**10688692.31**	**16851410.03**	**13218631.78**	**11323361.03**	**11280757**

Source: EMRI audited statements of accounts.

Figures in brackets are percentages.

Table 4.2(b)

From the year 2015-16 to 2017-18, Head-wise Administrative Expenditure of the EMRI (in Rs.)

Items	2015-16	Percentage	2016-17	Percentage	2017-18	Percentage
Carriage Inward	5470	(0.05%)	-	-	90844	(1.68%)
Staff Insurance Expenses	-	-	-	-	-	-
Packing Material Expenses	32576	(0.32%)	14610	(0.18%)	6050	(0.11%)
Meeting Expenses-Government Board	1813	(0.02%)	-	-	-	-
Rounding Off	13	(0.00%)	1008	(0.01%)	835	(0.02%)
Insurance Premium General	46302	(0.45%)	48822	(0.61%)	36347	(0.67%)
Printing of PCR Books	-	-	-	-	-	-

Items	2015-16	Percentage	2016-17	Percentage	2017-18	Percentage
Staff Welfare Expenses	-	-	-	-	-	-
News Paper Advertisement	-	-	-	-	-	-
Housekeeping	558023	(5.44%)	291998	(3.68%)	257797	(4.78%)
Data Entry Charges- PCR Forms	-	-	-	-	-	-
Staff Recruitment Expenses	-	-	-	-	-	-
Staff Relocation Expenses	-	-	-	-	-	-
Electricity Charges	1606996	(15.67%)	1256170	(15.82%)	1214089	(22.50%)
Consultancy Charges	151200	(1.47%)	37445	(0.47%)	70296	(1.30%)
Water Charges	-	-	-	-	-	-
Professional Charges	86993	(0.85%)	50462	(0.64%)	20208	(0.37%)
Carriage Outward	-	-	-	-	-	-
Postage & Courier Charges	281411	(2.74%)	232157	(2.92%)	78559	(1.46%)
Printing & Stationery	1448334.35	(14.13%)	749261	(9.44%)	324665	(6.02%)
News Papers & Periodicals	157337	(1.53%)	133008	(1.68%)	77534	(1.44%)
Diesel Expenses on Generator	494599	(4.82%)	372696	(4.69)	316698	(5.87%)
Medical Reimbursement	-	-	-	-	-	-
Office Expenses	40440	(0.39%)	20659	(0.26%)	10432	(0.19%)
Garden Maintenance	36545	(0.36%)	22006	(0.28%)	24655	(0.46%)
Guest House Maintenance	-	-	-	-	-	-
Security Charges	1152414	(11.24%)	719220	(9.06%)	589751	(10.93%)
Octroi Charges	-	-	-	-	-	-
Internet Expenses	-	-	-	-	-	-
Telephone Landlines	-	-	-	-	-	-
Internal Audit	45321	(0.44%)	23000	(0.29%)	23600	(0.44%)
Legal Charges	2810	(0.03%)	35317	(0.44%)	22610	(0.42%)
Man Power Consultancy Services	936350	(9.13%)	757450	(9.54%)	834275	(15.46%)
Misc. Expenses	-	-	-	-	-	-
Bank Charges	-	-	-	-	-	-
Interest paid Others	42163	(0.41%)	-	-	6794	(0.13%)
Tender & Bid Expenses	320414	(3.13%)	265153	(3.34%)	31342	(0.58%)
Marketing Expenses	258893	(2.53%)	419333	(5.28%)	448537	(8.31%)
Rent	304765	(2.97%)	-	-	-	-
Repair & Maintenance	2241889.13	(21.87%)	2490158	(31.36%)	909920	(16.86%)
Total	**10253071**	-	**7939933**	-	**5395838**	-

Source: EMRI audited statements of accounts.

It is clear from the above tables that the main items of administrative expenditure are: Carriage Inward, Staff Insurance Expenses, Packing Material Expenses, Meeting Expenses-Government Board, Rounding Off, Insurance Premium General, Printing of PCR Books, Staff Welfare Expenses, News Paper Advertisement, Housekeeping, Data Entry Charges- PCR Forms, Staff Recruitment Expenses, Staff Relocation Expenses, Electricity

Charges, Consultancy Charges, Water Charges, Professional Charges, Carriage Outward, Postage & Courier Charges, Printing & Stationery, News Papers & Periodicals, Diesel Expenses on Generator, Medical Reimbursement, Office Expenses, Garden Maintenance, Guest House Maintenance, Security Charges, Octroi Charges, Internet Expenses, Telephone Landlines, Internal Audit, Legal Charges, Man Power Consultancy Services, Misc. Expenses, Bank Charges, Interest paid Others, Tender & Bid Expenses. The most important items in these items are employee insurance expenditure, employee welfare expenditure, electricity charges, printing and stationery, security charges, internet expenses, telephone landline, in which the amount of expenditure is higher than other items.

Operational Expenditure

In Table 4.3 the operational expenditure of the EMRI out of total grant–in-aid during the period 2008-09 to 2017-18 has been shown.

Table 4.3
Year-wise Operational Expenditure of the EMRI out of Total Grant-in-aid (in Rs.)

Year	Total Grant-in-aid	Total Operational Expenditure	Percentage of Operational Expenditure out of Total Grant-in-aid
2008-09	24,61,10,028.00	92855622.58	37.73
2009-10	19,26,40,608.00	125668836	65.23
2010-11	16,82,06,699.00	150997810	89.77
2011-12	20,37,02,930.00	175803438	86.30
2012-13	27,47,18,862.00	188335052	68.56
2013-14	32,91,45,218.00	204196274	62.04
2014-15	32,54,35,890.00	212743313	65.37
2015-16	40,40,21,470.00	220284748	54.52
2016-17	34,03,33,341.00	213287515	62.67
2017-18	25,41,36,253.00	189093459	74.41
Total	**2,73,84,51,299.00**	**1,77,32,66,067.58**	**64.75**

Source: EMRI audited statements of accounts.

From Table 4.3, it is clear that from the year 2008-09 to the year 2013-14, the percentage of the operational expenditure of EMRI was between 37.73 and 89.77 per cent out of the total grant received, maximum 89.77 per cent in the year 2010-11 and minimum 37.73 per cent in the year 2008-09. If the operational expenditure was calculated against total grant-in-aid from the year 2008-09 to 2017-18, it was 64.75 per cent. It is also clear from the table that the average operational expenditure of EMRI was 66.70 per cent out of grant-in-aid received between 2008-09 to 2017-18.

Different Heads of the Operational Expenditure

In Tables 4.4(a) and 4.4(b) the different heads of operational expenditure of EMRI during the period 2009-10 to 2017-18 have been shown.

Table 4.4(a)

Head-wise and Year-wise Operational Expenditure of EMRI during the Period 2008-09 to 2014-15 (in Rs)

Head	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
108 Call Center Salary	3158847.00 (3.23%)	4304869.00 (3.43%)	5184364.00 (3.43%)	5517971.00 (3.14%)	6061951.00 (3.22%)	2747229 (1.35%)	5009302 (2.35%)
Ambulance Personnel Cost	37839449.00 (38.71%)	53451235.00 (42.53%)	66770905.99 (44.22%)	79470214.00 (45.20%)	84807806.50 (45.03%)	89531752 (43.85%)	101666642 (47.79%)
Care Personnel Cost	2925756.00 (2.99%)	3175085.00 (2.53%)	4082222.00 (2.70%)	2669030.00 (1.52%)	2718852.00 (1.44%)	7810316 (3.82%)	3326965 (1.56%)
Fuel Cost	6964537.67 (7.13%)	15785871.56 (12.56%)	19559113.16 (12.95%)	20722371.71 (11.79%)	26506894.35 (14.07%)	35986395 (17.62%)	39852534 (18.73%)
Repair & Maintenance	2654397.33 (2.72%)	2492494.99 (1.98%)	2094987.85 (1.39%)	4034813.41 (2.30%)	4004191.73 (2.13%)	3172725 (1.55%)	3290918 (1.55%)
Medical Consumables	4356042.79 (4.46%)	3467281.72 (2.76%)	2974962.86 (1.97%)	3252338.53 (1.85%)	4739749.64 (2.52%)	4032828 (1.97%)	3666078 (1.72%)
Ambulance Mobile Telephone Expenses	2048850.72 (2.10%)	2621067.80 (2.09%)	2134565.38 (1.41%)	2101607.08 (1.20%)	1713115.00 (0.91%)	3092223 (1.51%)	2493725 (1.17%)
Replacement of Tires	207327.00 (0.21%)	3456969.51 (2.75%)	3390128.00 (2.25%)	3482293.50 (1.98%)	5124603.20 (2.72%)	5673141 (2.78%)	4448944 (2.09%)
Refurbishing of Ambulance	-	4978771.00 (3.96%)	7599429.16 (5.03%)	11651351.13 (6.63%)	13326597.91 (7.08%)	16529509 (8.09%)	16984787 (7.98%)
Uniforms	1216619.50 (1.24%)	1229275.77 (0.98%)	915920.12 (0.61%)	1005436.59 (0.57%)	830092.63 (0.44%)	1006539 (0.49%)	661960 (0.31%)
Vehicle Insurance	826920.00 (0.85%)	646127.00 (0.51%)	899630.00 (0.60%)	379795.50 (0.22%)	1213993.15 (0.64%)	890881 (0.44%)	789721 (0.37%)
Training Costs	7636659.00 (7.81%)	1894595.93 (1.51%)	2760495.50 (1.83%)	3849376.75 (2.19%)	4535822.50 (2.41%)	2161999 (1.06%)	2754530 (1.29%)
Other Insurance	-	-	-	-	-	-	-
Annual Maintenance	-	-	-	-	-	-	-
Other Salaries-Support Staff	5321489.15 (5.44%)	8161371.00 (6.49%)	9740977.00 (6.45%)	9337769.00 (5.31%)	8150806.00 (4.33%)	8660209 (4.24%)	8376670 (3.94%)
Marketing Expenses	7470260.61 (7.64%)	5023319.54 (4%)	3780194.69 (2.50%)	3222509.60 (1.83%)	2477796.29 (1.32%)	2129041 (1.04%)	384429 (0.18%)
Travelling Cost	8521065.86 (8.72%)	7229449.38 (5.75%)	8421222.22 (5.58%)	8255150.14 (4.70%)	8904148.00 (4.73%)	9448126 (4.63%)	7755352 (3.65%)
Administrative Expenses	6594538.98 (6.75%)	7751051.44 (6.17%)	10688692.31 (7.08%)	16851410.03 (9.59%)	13218631.78 (7.02%)	11323361 (5.55%)	11280757 (5.30%)
Total	**97742760.61**	**125668835.64**	**150997810.24**	**175803437.97**	**188335051.68**	**204196274**	**212743313**

Source: EMRI audited statements of accounts.

Figures in brackets are percentages

From the above table it is clear that from the year 2008-09 to the year 2014-15, the main items of operating expenditure of EMRI were as follows: -108Call Centre Salary, ambulance personnel cost, Care Personnel Cost, Fuel cost, Repair and maintenance, medical consumables, ambulance mobile telephone expenses, replacement of tires, Refurbishing of ambulance, uniforms, vehicle insurance, training costs, other insurance, annual

maintenance, other salaries support staff, and marketing expenses, travelling costs, administrative expenses.

Table 4.4(b)

Head-wise and year-wise operational Expenditure of the EMRI during the period from 2015-16 to 2017-18 (in Rs.)

Head	2015-16	2016-17	2017-18
Medical Consumables	3689612 (1.67%)	3275478 (1.54%)	2363271 (1.25%)
Ambulance Cost	59470742 (27%)	57204178 (26.82%)	43194162 (22.84%)
Recruitment & Training	3357192 (1.52%)	4144672 (1.94%)	3450545 (1.82%)
Employment Benefits Expenses	133534368 (60.62%)	131747550 (61.77%)	130100945 (68.80%)
Administrative Expenses	10253071 (4.65%)	7939933 (3.72%)	5395838 (2.85%)
Travelling & Conveyance Expenses	6644222 (3.02%)	5907346 (2.77%)	1999538 (1.06%)
Communication Expenses	3333067 (1.51%)	3066875 (1.44%)	2589162 (1.37%)
Finance & Bank Charges	2474 (0.00%)	1483 (0.00%)	-
Total	**220284748**	**213287515**	**189093461**

Source: EMRI audited statements of accounts.
Figures in brackets are percentages

It is clear from the above table that from the year 2015-16 to the year 2017-18, there are only eight heads of operational expenditure by adjusting the various heads. The main heads of operational expenditure are: - medical consumables, ambulance cost, recruitment and training, employment benefits expenses, administrative expenses, travelling and conveyance expenses, communication expenses, finance and bank charges It is also clear from the above tables that EMRI has the highest operational expenditure in employment benefits expenses, ambulance cost and administrative expenditure.

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Chapter-5

Utility and Quality of EMRI Operated 108 Ambulances

The utility of the 108 Ambulance Services for the people of the state (BPL and APL) has been done on the basis of socio-economic analysis of the sample beneficiaries of the sample districts as mentioned in Chapter 2. Apart from this, it has also been reviewed on the basis of the responses given by the sample beneficiary respondents regarding EMRI operated 108 ambulances. If the services were reviewed on the basis of social and economic analysis of the sample beneficiaries, then 1530 (50.65%) beneficiaries out of the total 3021 beneficiaries were above the poverty line and the remaining 1491 (49.35%) were below the poverty line. Thus, this scheme has benefitted the people of all the economic class of the state. If sample beneficiaries are reviewed on the basis of religion then all the religions (Hindu, Muslim, Sikh and Christian) have benefitted from this scheme. If the sample beneficiaries are reviewed on the basis of caste, then all the castes (general, scheduled castes, scheduled tribes and backward castes) have benefitted from this scheme. If the scheme is reviewed on the basis of gender, 2121 (70.21%) of the total 3021 beneficiaries were female belonging to pregnancy cases and ambulance deliveries benefitted from this scheme. It is also clear from the tables (2.8), (2.9) and (2.10) as mentioned in Chapter 2 that some beneficiaries 0.73 per cent were still residing in the Kutcha houses and 0.53 per cent had no electricity in their dwellings and 0.60 per cent had no toilets in their dwellings. This makes it evident that the services of the 108 ambulances also benefited the poor classes.

Opinion of the Sample Beneficiaries regarding the EMRI Operated Ambulances

During field study, efforts were made to find out the response of the sample beneficiaries of the sample districts with regard to the services of 108 ambulances and they were asked whether they were satisfied with the services provided by the 108 ambulances. Their opinion as given by them in this regard has been shown in Table 5.1.

Table 5.1

District-wise Classification of the Sample Beneficiaries According to their response towards the services of 108 Ambulances

District	Total Number of Respondents	Not satisfactory	%	Satisfactory	%
Bageshwar	506	-	-	506	100.00
Dehradun	508	-	-	508	100.00
Haridwar	502	-	-	502	100.00
Nainital	501	-	-	501	100.00
Rudraprayag	504	22	4.37	482	95.63
U.S. Nagar	500	-	-	500	100.00
Total	**3021**	**22**	**0.73**	**2999**	**99.27**

From Table 5.1, it is clear that out of a total of 3021 sample beneficiaries, 2999(99.27%) beneficiaries considered the services of 108 ambulances as satisfactory and the remaining 22(0.73%) did not consider as satisfactory. It shows that the EMRI operated 108 ambulances have benefitted the entire population of the state.

1. Evaluation of the Entire Gamut of Services being provided by 108 Ambulances

The evaluation of the entire gamut of services being provided by 108 ambulances has been discussed in the following heads

(a) Role of the EMRI Regarding Awareness Campaign

According to the contract, the responsibility of EMRI was determined to increase the level of awareness among the entire population of the state towards the scheme. During the study, it was attempted to know that the EMI was in compliance with this agreement? In this context, an attempt was made to get information from the sample beneficiaries of the sample districts to know the role of EMRI in this regard. The information given by them is shown in the following tables.

Level of Awareness regarding the Charge free Services of 108 Ambulances

During study, the sample beneficiaries of the sample districts were asked whether they were aware of the fact that the services of 108 ambulances are free of charge. On the basis of information provided by them, the level of their awareness in this regard has been shown in the following Table 5.2.

Table 5.2

District-wise Classification of the Sample Beneficiaries according to their Level of Awareness Regarding the Charge Free Services of 108 Ambulances

District	Total Respondents	Number of Beneficiaries Reported as			
		No	%	Yes	%
Bageshwar	506	85	16.80	421	83.20
Dehradun	508	15	2.95	493	97.05
Haridwar	502	6	1.20	496	98.80
Nainital	501	11	2.20	490	97.80
Rudraprayag	504	37	7.34	467	92.66
U.S. Nagar	500	-	-	500	100
Total	**3021**	**154**	**5.10**	**2867**	**94.90**

From above Table, it is clear that out of a total of 3021 beneficiaries, 2867(94.90%) reported that they were aware about the charge free services of 108 ambulances and the remaining 154(5.10%) did not have complete information in this regard.

The Sources of Information with Regard to the Services of 108 Ambulances

During study, the sample beneficiaries of the sample districts were asked as to how they get information regarding the services of 108 ambulances. On the basis of information provided by them, the sources of their information have been shown in Table 5.3.

Table 5.3

District-wise Classification of the Sample Beneficiaries According to their Sources of Information with regard to the Services of 108 Ambulances

District	Total Respondents	Aasha/ ANM	%	Friends/ Relatives/ Neighbours	%	Newspapers/ TV	%	Information Displayed on the Walls	%
Bageshwar	506	39	7.71	457	90.32	10	1.98	-	-
Dehradun	508	14	2.76	494	97.24	-	-	-	-
Haridwar	502	27	5.38	431	85.86	44	8.76	-	-
Nainital	501	5	1.00	458	91.42	21	4.19	17	3.39
Rudraprayag	504	27	5.36	465	92.26	12	2.38	-	-
U.S. Nagar	500	37	7.40	449	89.80	14	2.80	-	-
Total	**3021**	**149**	**4.93**	**2754**	**91.16**	**101**	**3.34**	**17**	**0.56**

From aforesaid Table 5.3, it is clear that out of a total of 3021 sample beneficiaries, 2754(91.16%) beneficiaries got the information regarding the services of 108 ambulances from their friends/relatives/neighbours, 149(4.93%) through Aasha/ANM, 101(3.34%) from the newspapers/TV and the remaining 17(0.56%) from the information displayed on the walls.

Level of Awareness Regarding the Parking Place of 108 Ambulances

During survey, the sample beneficiaries of the sample districts were asked whether they had the information about the parking place of 108 ambulances. In this context, their awareness level regarding the parking place of 108 ambulances has been shown in Table 5.4.

Table 5.4

District-wise Classification of the Sample Beneficiaries According to their Awareness Level Regarding Parking Place of 108 Ambulances

District	Total Respondents	Number of beneficiaries reported as			
		Not known	%	Known	%
Bageshwar	506	328	64.82	178	35.18
Dehradun	508	207	40.75	301	59.25
Haridwar	502	258	51.39	244	48.61
Nainital	501	271	54.09	230	45.91
Rudraprayag	504	490	97.22	14	2.78
U.S. Nagar	500	391	78.20	109	21.80
Total	**3021**	**1945**	**64.38**	**1076**	**35.62**

From Table 5.4, it is clear that out of a total of 3021 sample beneficiaries, 1945(64.38%) beneficiaries did not have awareness regarding the parking place of 108 ambulances and the remaining 1076(35.62%) had the awareness in this regard.

Details of the Parking Places of 108 Ambulances

During study, 1076 sample beneficiaries of the sample districts who had awareness about the parking places of 108 ambulances were requested to tell about those places where according to their awareness, the 108 ambulances park. The parking places as told by them have been shown in Table 5.5.

Table 5.5

District-wise Classification of the Sample Beneficiaries According to Details of the Parking Places of 108 Ambulances as Reported by them

District	Total Respondents	Block	%	Community Health Centre	%	District Hospital	%	Primary Health Centre	%	Road Side	%
Bageshwar	178	-	-	1	0.56	175	98.31	-	-	2	1.12
Dehradun	301	-	-	179	59.47	83	27.57	17	5.65	22	7.31
Haridwar	244	-	-	113	46.31	81	33.20	10	4.10	40	16.39
Nainital	230	13	5.65	28	12.17	185	80.43	1	0.43	3	1.30
Rudraprayag	14	-	-	-	-	10	71.43	-	-	4	28.57
U.S. Nagar	109	-	-	20	18.35	88	80.73	-	-	1	0.92
Total	**1076**	**13**	**1.21**	**341**	**31.69**	**622**	**57.81**	**28**	**2.60**	**72**	**6.69**

Table 5.5 shows that out of a total of 1076 sample beneficiaries who had information about the parking places of 108 ambulances, 622(57.81%) beneficiaries told about the place of stoppage of 108 ambulances as the district hospital, 341(31.69%) as the community

health centre, 72(6.69%) as road side, 28(2.60%) as the primary health centres and the remaining 13(1.21%) as the block office.

Medium for Seeking Help from 108 Ambulances

During study, the sample beneficiaries of the sample districts where asked as to who helped them in getting the services of 108 ambulances. The medium who helped them as per the information provided by them has been shown in Table 5.6.

Table 5.6

District-wise Classification of the Sample Beneficiaries According to Medium that helped them in obtaining the Services of 108 Ambulances

District	Total Respondents	Phone call by ANM	%	Phone call by family member	%	Personal phone call	%	Phone call by neighbor/relative	%	Phone Call by Stranger	%
Bageshwar	506	162	32.02	299	59.09	13	2.57	19	3.75	13	2.57
Dehradun	508	177	34.84	331	65.16	-	-	-	-	-	-
Haridwar	502	214	42.63	288	57.37	-	-	-	-	-	-
Nainital	501	71	14.17	429	85.63	1	0.20	-	-	-	-
Rudraprayag	504	112	22.22	392	77.78	-	-	-	-	-	-
U.S. Nagar	500	113	22.60	387	77.40	-	-	-	-	-	-
Total	**3021**	**849**	**28.10**	**2126**	**70.37**	**14**	**0.46**	**19**	**0.63**	**13**	**0.43**

From Table 5.6, it is clear that out of a total of 3021 sample beneficiaries, 2126(70.37%) beneficiaries availed the services of 108 ambulances on the phone call to 108 by a member of the family of beneficiary, 849(28.10%) on a phone call to 108 by ANM, 19(0.63%) on a call to 108 by a neighbour/relative, 14(0.46%) on a persona phone call to 108 and remaining 13(0.43%) on a phone call to 108 by some stranger.

It is clear from the above tables that the role of EMRI in the context of providing complete information regarding the scheme was not up to the mark. Because cent per cent of the sample beneficiaries of the sample districts had neither information about free services of the ambulances nor did they have knowledge about the parking places of the ambulances. It is also clear from the above statement that 91.16 per cent beneficiaries of the sample districts had availed the services of the 108 ambulances through friends/relatives/neighbours. This makes it clear that awareness campaigns in each district were not organised by EMRI as required time to time.

(b) Role of the EMRI in Relation to providing 108 Services to the Beneficiaries on Time as per the Agreement

In the agreement, it had been clarified that the EMIR will provide response services within 35 minutes in the rural areas and within 25 minutes in the urban areas. During the study, the sample beneficiaries of the sample districts were asked after how long after being

called by them or others, 108 ambulances were available at their house or in the place suggested. According to the information given by them, the availability of 108 beneficiaries is shown in the following table 5.7.

Table 5.7

District-wise Classification of the Sample Beneficiaries According to Time of Availability of 108 Ambulances to them After the Phone Call

District	Total Respondents	5-10 Minutes	%	10-20 Minutes	%	20-30 Minutes	%	30-40 Minutes	%	40-50 Minutes	%	More than 50 Minutes	%
Bageshwar	506	-	-	16	3.16	146	28.85	261	51.58	77	15.22	6	1.19
Dehradun	508	5	0.98	124	24.41	66	12.99	162	31.89	125	24.61	26	5.12
Haridwar	502	44	8.76	151	30.08	163	32.47	89	17.73	33	6.57	22	4.38
Nainital	501	60	11.98	67	13.37	150	29.94	188	37.52	34	6.79	2	0.40
Rudraprayag	504	-	-	7	1.39	81	16.07	197	39.09	167	33.13	52	10.32
U.S. Nagar	500	1	0.20	6	1.20	188	37.60	268	53.60	34	6.80	3	0.60
Total	**3021**	**110**	**3.64**	**371**	**12.28**	**794**	**26.28**	**1165**	**38.56**	**470**	**15.56**	**111**	**3.67**

From Table 5.7, it is clear that out of a total of 3021 sample beneficiaries, 1165(38.56%) beneficiaries received the services of 108 ambulances within 30 to 40 minutes after the phone call, 794(26.28%) within 20 to 30 minutes, 470(15.56%) within 40 to 50 minutes, 371(12.28%) within 10 to 20 minutes, 111(3.67%) more than 50 minutes after the phone call and remaining 110(3.64%) within 5 to 10 minutes.

Time taken to Carry the Patient to the Hospital

During study, the sample beneficiaries of the sample districts were asked as to within what time after their sitting in the 108 ambulance, they reached hospital. On the basis of information as provided by them, the time which was taken by the Ambulance to deliver the patient to the hospital has been shown in Table 5.8.

Table 5.8

District-wise Classification of the Sample Beneficiaries According to Time Taken in Reaching Hospital after Sitting in 108 Ambulances

District	Total Respondents	5-10 Minutes	%	10-20 Minutes	%	20-30 Minutes	%	30-40 Minutes	%	40-50 Minutes	%	More than 50 Minutes	%
Bageshwar	506	-	-	17	3.36	320	63.24	148	29.25	14	2.77	7	1.38
Dehradun	508	13	2.56	151	29.72	191	37.60	146	28.74	7	1.38	-	-
Haridwar	502	34	6.77	209	41.63	143	28.49	102	20.32	12	2.39	2	0.40
Nainital	501	37	7.39	75	14.97	220	43.91	145	28.94	24	4.79	-	-
Rudraprayag	504	1	0.20	5	0.99	69	13.69	279	55.36	119	23.61	31	6.15
U.S. Nagar	500	1	0.20	14	2.80	213	42.60	237	47.40	33	6.60	2	0.40
Total	**3021**	**86**	**2.85**	**471**	**15.59**	**1156**	**38.27**	**1057**	**34.99**	**209**	**6.92**	**42**	**1.39**

From Table 5.8, it is clear that out of a total of 3021 sample beneficiaries, 1156(38.27%) beneficiaries reached hospital within 20 to 30 minutes after sitting in the 108 ambulances, 1057(34.99%) within 30 to 40 minutes, 471(15.59%) within 10 to 20 minutes, 209(6.92%) within 40 to 50 minutes, 86(2.85%) within 5 to 10 minutes and the remaining 42(1.39%) after more than 50 minutes.

In relation to providing 108 services to the beneficiaries on time as per the agreement, it is clear from the above analysis that the EMRI did not provide 108 ambulance services to the beneficiaries on time and was unable to take the patient to the hospital on time.

(c) Requirement of Treatment for the Patient at the Time of Riding the 108 Ambulance

During study, the sample beneficiaries of the sample districts were asked whether they required first aid at the time of riding the 108 ambulance. The information as provided by them has been shown in Table 5.9.

Table 5.9
District-wise Classification of the Sample Beneficiaries According to Requirement of First Aid to them

District	Total Respondents	Did not require	%	Need of first aid	%
Bageshwar	506	265	52.37	241	47.63
Dehradun	508	92	18.11	416	81.89
Haridwar	502	63	12.55	439	87.45
Nainital	501	171	34.13	330	65.87
Rudraprayag	504	379	75.20	125	24.80
U.S. Nagar	500	279	55.80	221	44.20
Total	**3021**	**1249**	**41.34**	**1772**	**58.66**

From Table 5.9, it is clear that out of a total of 3021 sample beneficiaries, 1772(58.66%) beneficiaries were in need of first aid at the time of riding the 108 ambulances and the remaining 1249(41.34%) did not require the first aid.

Availability of First Aid to the Beneficiaries

During survey, 1772 sample beneficiaries of the sample districts who required first aid were asked whether they were provided first aid in 108 ambulances. The information in this regard as provided by them has been shown in Table 5.10.

Table 5.10
District-wise Classification of the Sample Beneficiaries According to Availability of First Aid

District	Total Respondents	Not provided	%	Provided	%
Bageshwar	241	2	0.83	239	99.17
Dehradun	416	-	-	416	100
Haridwar	439	-	-	439	100
Nainital	330	-	-	330	100
Rudraprayag	125	1	0.80	124	99.20
U.S. Nagar	221	-	-	221	100
Total	**1772**	**3**	**0.17**	**1769**	**99.83**

From Table 5.10, it is clear that out of a total of 1772 sample beneficiaries who were in need of first aid, 1769(99.83%) were provided first aid in the ambulances and the remaining 3(0.17%) were not given any first aid.

(d) The Behaviour of the Employees Present in the 108 Ambulances with the patient

During study, the sample beneficiaries of the sample districts were asked about the behaviour of employees present in the 108 ambulances towards them. The information as provided by them has been shown in Table 5.11.

Table 5.11

District-wise Classification of the Sample Beneficiaries According to Behaviour of the Employees towards them

District	Total Respondents	Very good	%	Good	%	Satisfactory	%	Not Satisfactory	%
Bageshwar	506	73	14.43	349	68.97	84	16.60	-	-
Dehradun	508	85	16.73	341	67.13	82	16.14	-	-
Haridwar	502	75	14.94	348	69.32	78	15.54	1	0.20
Nainital	501	88	17.56	197	39.32	216	43.11	-	-
Rudraprayag	504	77	15.28	326	64.68	100	19.84	1	0.20
U.S. Nagar	500	63	12.60	242	48.40	195	39.00	-	-
Total	**3021**	**461**	**15.26**	**1803**	**59.68**	**755**	**24.99**	**2**	**0.07**

From Table 5.11, it is clear that out of a total of 3021 sample beneficiaries, 1803(59.68%) beneficiaries considered the behaviour of the employees present in 108 ambulances as good, 755(24.99%) as satisfactory, 461(15.26%) very good and the remaining 2(0.07%) beneficiaries did not consider the behaviour of the employees present in 108 ambulances as satisfactory.

Continuous use of Machinery/Equipments Available in Ambulances and their Maintenance Status

In Chapter 3 the physical condition of the 30 sample ambulances and presence of working staff in the sample ambulances and their functioning has been discussed (kindly see annexure-1). On the basis of the physical observation the condition of the sample ambulances and the status of continuous use/maintenance of the machinery/equipments available in the sample ambulances were assessed. It was found that in all the sample ambulances all the required machinery and equipments such as - Oxygen kit, Chaukhata /

Stretcher; Gloves; syringes; Needles; Sterelizer; wiper; Bandage; Maternity kit; Cold packs; Ped pens; Cardiac Monitor; Burn Kit were found in all the sample ambulances. But in some ambulances such as an oxygen kit, automatic blood pressure device, glucometer which are very essential for the patient's life, were not fully functional, and the condition of their maintenance was also not found satisfactory. In some ambulances, the sheets and cushions laid on the chaukhata/stretcher were not found clean.

During observation it was found that, in 50 per cent of the sample ambulances of Bageshwar, Dehradun, Haridwar, Nainital, Rudraprayag and Udhamsinghnagar districts the oxygen kit, automatic pressure device, glucometre which are very essential for the patient's life were not found fully in the working condition. Except Dehradun district, in other ambulances of the sample district the bed sheets and cushions laid on the chaukhata/stretcher were not found clean. It appears from this that special attention has not been given in the context of cleanliness by the management of the EMRI.

During the study, the EMRI head working at Dehradun office was interviewed regarding the continuous use of machinery/equipments available in ambulances and their maintenance status. According to the information given by him, the above conclusions as discussed above were confirmed. He said that out of the total ambulances working in the state, 65 per cent of them have been working for about eight years, because of continuous service their efficiency has decreased. Majority of them had become out of order during service, as a result there is a lot of delay in making an alternate arrangement, which has a negative impact on the quality of the service. On the basis of information given by the employees of the 30 sample ambulances, 22 (73.3%), ambulances went out of order during the service. The head of the EMRI also realised that the available machinery and equipments available in the ambulances had been damaged due to continuous use and some of them were not in a position to work. He informed us that the amount of money that is required for repairing these equipments and machinery will be equivalent to the amount in which new machinery and equipments can be purchased. But no efforts have been made by the government to solve this problem. As a result, old machinery and equipments are operational in the ambulances.

Position of regular Availability of Staff in the Ambulances

As per the rule, the presence of one EMT and a driver in the ambulance is necessary for all time. During study, the sample beneficiaries of the sample districts were asked whether the ambulance in which they had taken seat both the EMT and the deriver were available in the ambulance at that time. On the basis of information as provided by them, the availability of employees in 108 ambulances has been shown in Table 5.12.

Table 5.12

District-wise Classification of the Sample Beneficiaries According to Availability of Employees at the Time of their Riding in 108 Ambulances

District	Total Respondents	Both driver and EMT were present	%	Only driver was present	%
Bageshwar	506	504	99.60	2	0.40
Dehradun	508	508	100.00	-	-
Haridwar	502	339	67.53	163	32.47
Nainital	501	489	97.60	12	2.40
Rudraprayag	504	504	100.00	-	-
U.S. Nagar	500	489	97.80	11	2.20
Total	**3021**	**2833**	93.78	**188**	6.22

From Table 5.12, it is clear that out of a total of 3021 sample beneficiaries, 2833(93.78%) beneficiaries found both deriver and EMT present in the 108 ambulances while the remaining 188(6.22%) beneficiaries found only the driver present in the ambulances.

It is clear from the above statement that the role of EMRI was not fully satisfactory in ensuring availability of employees in the ambulances, as out of the total sample beneficiaries, 6.22 per cent beneficiaries got only driver available in their ambulances, while the presence of EMT is compulsory in every ambulance.

Analysis of Operational Expenditure Utility/Excess

Based on the information provided by EMRI Head Office, from the year 2008-09 to the year 2017-18 the operational expenditure as well as excess amount of each financial year has been shown in Table 5.13.

Table 5.13

Year-wise Total Grants-in-aid received by EMRI, Operational Expenditure, Capital Expenditure and Excess Amount at the end of the Financial Year(in Rs.).

Year	Total Grants-in-aid	Total Operational Expenditure	% of Total Operational Exp. out of Total Grant-in-Aid	Operational Amount borne by EMRI	Capital Expenditure	% of Total Capital Exp. out of Total Grant-in-Aid	Balance Amount	% of Balance Amount out of Total Grant-in-Aid
1	2	3	4	5	6	7	8	9
2008-09	24,61,10,028.00	92855622.58	37.73	4887138.03	124877213.41	50.74	2,83,77,192	11.53
2009-10	19,26,40,608.00	125668835.64	65.23	-	20993803	10.90	4,59,77,969	23.87
2010-11	16,82,06,699.00	150997810	89.77	-	7012128	4.17	1,01,96,761.00	6.06
2011-12	20,37,02,930.00	175803437.97	86.30	-	7857309	3.86	20042183	9.84
2012-13	27,47,18,862.00	188335051.68	68.56	-	7274907	2.65	7,91,08,903.00	28.80
2013-14	32,91,45,218.00	204196274	62.04	-	3964716	1.20	12,09,84,228.00	36.76
2014-15	32,54,35,890.00	212743313	65.37	-	2069619	0.64	11,06,22,958.00	33.99
2015-16	40,40,21,470.00	220284748	54.52	-	35000	0.01	18,37,01,722.00	45.47
2016-17	34,03,33,341.00	213287515	62.67	-	-	-	12,70,45,826.00	37.33
2017-18	25,41,36,253.00	189093459	74.41	-	29250	0.01	65013545.31	25.58
Total	2,73,84,51,299.00	1,77,32,66,066.87	64.75	4887138.03 (0.18)	17,41,13,945.41	6.36	79,10,71,287	28.89

Source: EMRI audited statements of accounts.

It is clear from the above table that the operational expenditure of EMRI from the year 2008-09 to the year 2013-14 was between 37.73 and 89.77 percent of the total grants, maximum 89.77 per cent in the year 2010-11 and minimum 37.73 per cent in the year 2008-09. On the contrary, capital expenditure was between 1.20 and 50.74 percent of the total grants, maximum 50.74 per cent in the year 2008-09 and minimum 8.20 per cent in the year 2013-14. During these years out of the total grants-in-aid at the time of expiry of the financial years, the percentage of the excess amount was between 6.06 and 36.76 per cent, maximum 36.76 per cent in the year 2013-14 and minimum 6.06 per cent in the year 2010-11. If the utility of funds and excess amount is analyzed from the year 2008-09 to the year 2017-18, it is clear from the above table that 6.06 to 45.47 per cent of the total received grant remained untouched by the EMRI, maximum 45.47 per cent in 2015-16 and minimum 6.06 per cent in 2010-11. The excess amount of each financial year remains in the bank account of EMRI. The excess amount of each financial year is not returned to the state government, but the amount is being added in the grants-in-aid of the next financial year. This has been clarified through table 5.24.

Capital Expenditure of the EMRI

The Table 5.14 shows year-wise capital expenditure of the EMRI

Table 5.14

Head-wise/Year-wise Capital Expenditure of the EMRI

Head	Year									
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18
Building Asset Cost	-	-	-	-	2030524 (27.91%)	-	-	-	-	-
Computer Hardware Asset Cost	15809287 (12.66%)	611939 (2.91%)	2082679 (29.70%)	1118142 (14.23%)	211455 (2.91%)	3839052 (96.83%)	1693126 (81.81%)	-	-	-
Computer Software Asset Cost	1991222 (1.59%)	640971 (3.05%)		455842 (5.80%)	128700 (1.77%)	-	-	-	-	29250
Ambulances Vehicle Asset Cost	74196509 (59.42%)	17430201 (83.03%)	4204846 (59.97%)	-1290977 (-16.43)	4058162 (55.78%)	33544 (0.85%)	-1612800 (-77.93%)	-	-	-
Furniture & Fixture Asset cost	5646230 (4.52%)	287359 (1.37%)	139320 (1.99%)	924796 (11.77%)	50207 (0.69%)	-	254993 (12.32%)	35000 (100%)	-	-
Office equipment Asset Cost	1316719 (1.05%)	127720 (0.61%)	60314 (0.86%)	197083 (2.51%)	227860 (3.13%)	2290 (0.06%)	-	-	-	-
Medical Equipment Asset Cost	21287287 (17.05%)	1895613 (9.03%)	289814 (4.13%)	6406723 (81.54%)	-3416179 (-46.96%)		38627 (1.87%)	-	-1814 (-100%)	-
Electrical & Electronic Asset Cost	4629961 (3.71%)	-	235155 (3.35%)	45701 (0.58%)	-	89830 (2.27%)	-	-	-	-
Fixed Assets as per books	124877213 (100%)	20993803 (100%)	7012128 (100%)	7857309 (100%)	3290729 (45.23%)	3964716 (100%)	373946 (18.07%)	35000 (100%)	-1814 (100%)	29250 (100%)
Fixed Asset as per Capital Grant	124877213 (100%)	20993803 (100%)	7012128 (100%)	7857309 (100%)	7274907 (100%)	3964716 (100%)	2069619 (100%)	35000 (100%)	-	29250 (100%)
Difference	-	-	-	-	-3984178 (54.77%)	-	-1695673 (81.93%)	-	-1814 (100%)	-

Source: EMRI audited statements of accounts.

Note: 1. Rs. 3984178 was distributed among the districts for the purchase Doli

2. A ambulance costing of Rs. 1695673 was flooded in the flood

3. Rs. 1814 was recovered from the EMRI.

4. Figures in brackets are percentages.

The Table 5.14 shows that the important capital expenditure heads were; building asset cost, computer hardware asset cost, computer software asset cost, ambulances vehicle asset cost, furniture & fixture asset cost, office equipment asset cost, medical equipment asset cost, electrical & electronic asset cost, fixed assets as per books, fixed asset as per capital grant. The table also shows that ambulances vehicle asset cost is the most important head of the capital expenditure. This head represents the purchase cost of the ambulance. Another important head is the computer hardware asset cost.

Year-wise Increase and Decrease in the Administrative Expenditure, Operational Expenditure and Capital Expenditure

Following Tables 5.15, 5.16 and 5.17 show year-wise increase and decrease in the administrative, operational and capital expenditures of the EMRI respectively.

Table 5.15

Year-wise Increase and Decrease in the Administrative Expenditure of EMRI (in Rs.)

Year	Number of Ambulances	Administrative Expenditure	Year-wise Increase/ Decrease in Administrative Expenditure
2008-09	90	6594538.98	-
2009-10	108	7751051.44	1156512
2010-11	108	10688692.31	2937641
2011-12	140	16851410.03	6162718
2012-13	140	13218631.78	-3632778
2013-14	140	11323361	-1895271
2014-15	143	11280757	-42604
2015-16	144	10253071	-1027686
2016-17	143	7939933	-2313138
2017-18	143	5395838	-2544095

Source: EMRI audited statements of accounts.

It is clear from the above table that the percentage of administrative expenditure has increased steadily up to 2011-12, whereas after 2011-12, the percentage of administrative expenditure has decreased compared to the previous year.

Table 5.16

Year-wise Increase and Decrease in the Operational Expenditure of EMRI (in Rs.)

Year	Number of Ambulances	Operational Expenditure	Year-wise Increase/ Decrease in Operational Expenditure
2008-09	90	92855622.58	-
2009-10	108	125668835.6	32813213
2010-11	108	150997810	25328974
2011-12	140	175803438	24805628
2012-13	140	188335051.7	12531614
2013-14	140	204196274	15861222
2014-15	143	212743313	8547039
2015-16	144	220284748	7541435
2016-17	143	213287515	-6997233
2017-18	143	189093459	-24194056

Source: EMRI audited statements of accounts.

It is clear from the above table that the percentage of operational expenditure has increased steadily from 2008-09 to 2015-16, whereas in the year 2016-17 and 2017-18, the percentage of operational expenditure has decreased compared to the previous year.

Table 5.17

Year-wise Increase and Decrease in the Capital Expenditure of the EMRI (in Rs.)

Year	Number of Ambulances	Capital Expenditure	Year-wise Increase/ Decrease in Capital Expenditure
2008-09	90	124877213.4	-
2009-10	108	20993803	-103883410
2010-11	108	7012128	-13981675
2011-12	140	7857309	845181
2012-13	140	7274907	-582402
2013-14	140	3964716	-3310191
2014-15	143	2069619	-1895097
2015-16	144	35000	-2034619
2016-17	143	-	-
2017-18	143	29250	-

Source: EMRI audited statements of accounts.

It is clear from the above table that in all the years except 2011-12, the percentage of capital expenditure has decreased consistently compared to the previous year.

Percentage increase and decrease in administrative, operational and capital expenditures in comparison to base year 2008-09

In the following Tables 5.18, 5.19 and 5.20 in comparison to base year 2008-09 the percentage increase and decrease in administrative, operational and capital expenditures has been shown respectively.

Table 5.18

Percentage Increase and Decrease in Administrative Expenditure in Comparison to base Year 2008-09 (in Rs.)

Year	Number of Ambulances	Administrative Expenditure	Year-wise Increase/ Decrease in Comparison to year 2008-09	% Increase/Decrease in Comparison to year 2008-09
2008-09	90	6594538.98		
2009-10	108	7751051.44	1156512	17.54
2010-11	108	10688692.31	4094153	62.08
2011-12	140	16851410.03	10256871	155.54
2012-13	140	13218631.78	6624093	100.45
2013-14	140	11323361	4728822	71.71
2014-15	143	11280757	4686218	71.06
2015-16	144	10253071	3658532	55.48
2016-17	143	7939933	1345394	20.40
2017-18	143	5395838	-1198701	-18.18

Source: EMRI audited statements of accounts.

The Table shows that compared to the year 2008-09, in year 2017-18 the administrative expenditure of the EMRI has decreased by 18.18 per cent.

Table 5.19

Percentage Increase and Decrease in Operational Expenditure in Comparison to base Year 2008-09 (in Rs.)

Year	Number of Ambulances	Operational Expenditure	Year-wise Increase/ Decrease in Comparison to year 2008-09	% Increase/Decrease in Comparison to year 2008-09
2008-09	90	92855622.58	-	-
2009-10	108	125668835.6	32813213	35.34
2010-11	108	150997810	58142187	62.62
2011-12	140	175803438	82947815	89.33
2012-13	140	188335051.7	95479429	102.83
2013-14	140	204196274	111340651	119.91
2014-15	143	212743313	119887690	129.11
2015-16	144	220284748	127429125	137.23
2016-17	143	213287515	120431892	129.70
2017-18	143	189093459	96237836	103.64

Source: EMRI audited statements of accounts.

The Table shows that compared to the year 2008-09, in year 2017-18 the operational expenditure of the EMRI has increased by 103.64 per cent.

Table 5.20

Percentage Increase and Decrease in Capital Expenditure in Comparison to base Year 2008-09 (in Rs.)

Year	Number of Ambulances	Capital Expenditure	Year-wise Increase/ Decrease in Comparison to year 2008-09	% Increase/Decrease in Comparison to year 2008-09
2008-09	90	124877213.4	-	-
2009-10	108	20993803	-103883410	-83.19
2010-11	108	7012128	-117865085	-94.38
2011-12	140	7857309	-117019904	-93.71
2012-13	140	7274907	-117602306	-94.17
2013-14	140	3964716	-120912497	-96.83
2014-15	143	2069619	-122807594	-98.34
2015-16	144	35000	-124842213	-99.97
2016-17	143	-	-	-
2017-18	143	29250	-124847963	-99.98

Source: EMRI audited statements of accounts.

The Table shows that compared to the year 2008-09, in year 2017-18 the capital expenditure of the EMRI has decreased by 99.98 per cent.

Relationship between the Operational Expenditure and Number of Ambulances

In Table 5.21 year-wise operational expenditure of the EMRI has been shown according to the number of operating ambulances.

Table 5.21

Year-wise Percentage Increase and decrease in the Operational Expenditure According to the Percentage increase and decrease in the Number of Ambulances

Year	Number of Ambulances	Year wise % Increase/Decrease in the No. of Ambulances	Year wise % Increase/Decrease in the Operational Expenditure
2008-09	90	-	-
2009-10	108	20.00	35.34
2010-11	108	20.00	62.62
2011-12	140	55.56	89.33
2012-13	140	55.56	102.83
2013-14	140	55.56	119.91
2014-15	143	58.89	129.11
2015-16	144	60.00	137.23
2016-17	143	58.89	129.70
2017-18	143	58.89	103.64

Source: EMRI audited statements of accounts.

It is clear from the above table that even though the number of ambulances in the year 2009-10 and 2010-11 has not increased, the operational expenditure of EMRI has increased by 35.34 per cent and 62.62 per cent respectively compared to the year 2008-09. Similarly from the year 2011-12 to 2013-14 the percentage increase in the number of ambulances in these years was 55.56 per cent compared to the year 2008-09, while the percentage increase in operational expenditure in these years increased by 89.33, 102.83 and 119.91 per cent respectively. In the year 2014-15, the percentage increase in the number of ambulances was 58.89 compared to the year 2008-09, while the percentage increase in operational expenditure this year was 129.11. In the year 2015-16, the percentage increase in the number of ambulances was 60.00 compared to the year 2008-09, while the percentage increase in operational expenditure this year was 137.23. In the year

2016-17, the percentage increase in the number of ambulances was 58.89 compared to the year 2008-09, while the percentage increase in operational expenditure this year was 129.70. In the year 2017-18, the percentage increase in the number of ambulances was 58.89 compared to the year 2008-09, while the percentage increase in operational expenditure this year was 103.64.

It is clear from this that there is no logical equation between the number of ambulances and the operational expenditure. Although the number of ambulances has not increased, the operational expenditure has steadily rising.

Per Ambulance Per month Operational Expenditure of the EMRI

Table 5.22 shows per ambulance per month operational expenditure of the EMRI, during the period 2008-09 to 2017-18.

Table 5.22
Year-wise Per Ambulance Per Month Operational Expenditure of the EMRI (in Rs.)

Year	Total Ambulances	Total Operational Expenditure	Per Ambulance Per Year Operational Expenditure	Per Ambulance Per Month Operational Expenditure
2008-09	90	92855623	1031729.144	85977.43
2009-10	108	125668835.64	1163600.33	96966.69
2010-11	108	150997810	1398127.87	116510.66
2011-12	140	175803437.97	1255738.843	104644.90
2012-13	140	188335051.68	1345250.369	112104.20
2013-14	140	204196274	1458544.814	121545.40
2014-15	143	212743313	1487715.476	123976.29
2015-16	144	220284748	1529755.194	127479.60
2016-17	143	213287515	1491521.084	124293.42
2017-18	143	189093459	1322331.881	110194.32
Average		**177326606.73**	**1348431.50**	**112369.29**

Source: EMRI audited statements of accounts.

It is clear from the above table that during the period 2008-09 to 2017-18 per ambulance per month operational expenditure of the EMRI was between Rs. 85977.43 and Rs. 127479.60, maximum Rs. 127479.60 in the year 2015-16 and minimum Rs. 85977.43 in the year 2008-09. If the average per ambulance per month operational expenditure is calculated from the year 2008-09 to 2017-18, then it is Rs. 112369.29.

Per Unit/ Person Operational Expenditure

Table 5.23 shows per unit/person operational expenditure of the EMRI during the period from 2008-09 to 2017-18.

Table 5.23

Year-wise Per Unit/Person Operational Expenditure of the EMRI According to the Number of Emergencies handled (in Rs.)

Year	Operational Expenditure	Number of Emergencies Handled	Per Unit Cost
2008-09	92855622.58	45264	2051.42
2009-10	125668835.64	104436	1203.31
2010-11	150997810	117119	1289.27
2011-12	175803437.97	149144	1178.75
2012-13	188335051.68	154847	1216.27
2013-14	204196274	161706	1262.76
2014-15	212743313	167375	1271.06
2015-16	220284748	172013	1280.63
2016-17	213287515	158605	1344.77
2017-18	189093459	126405	1495.93
Average	**177326606.69**	**135691.40**	**1359.42**

Source: EMRI audited statements of accounts.

The Table 5.23 shows that during the period from 2008-09 to 2017-18 the average per unit operational expenditure of the EMRI was Rs. 1359.42.

Comparative Study of Cost and Operational Expenditure of EMRI Operated 108 Ambulances vis-à-vis Other States and Analysis of National Rural Health Mission Grant

(a) Analysis of the NRHM Grant

Table 5.24 shows year-wise NRHM grant compared to total grants-in-aid received by the EMRI.

Table 5.24

Year-wise NRHM Grant Compared to the Total Grants-in-aid received by the EMRI (in Rs.)

Year	Opening Balance	NRHM Grants	Amount received from State Govt. and Bank Interest	Amount from Bank Interest	Total Grants-in-aid
2008-09	-	10,00,00,000.00 (40.63%)	14,60,00,000.00 (59.32%)	1,10,028.00 (0.04%)	24,61,10,028.00
2009-10	2,83,77,192.00 (14.73%)	13,30,00,000.00 (69.04%)	3,00,00,000.00 (15.57%)	1263416.00 (0.66%)	19,26,40,608.00
2010-11	4,59,77,969.00 (27.33%)	8,98,00,000.00 (53.39%)	3,13,17,945.00 (18.62%)	11,10,785.00 (0.66%)	16,82,06,699.00
2011-12	1,01,96,761.00 (5.01%)	9,29,43,992.00 (45.63%)	10,05,62,177.00 (49.37%)	-	20,37,02,930.00

Year	Opening Balance	NRHM Grants	Amount received from State Govt. and Bank Interest	Amount from Bank Interest	Total Grants-in-aid
2012-13	20042183.00 (7.30%)	12,42,69,724.00 (45.24%)	13,04,06,955.00 (47.47%)	-	27,47,18,862.00
2013-14	7,91,08,903.00 (24.03%)	8,02,17,459.00 (24.37%)	16,98,18,856.00 (51.59%)	-	32,91,45,218.00
2014-15	12,09,84,228.00 (37.18%)	6,84,62,052.00 (21.04%)	13,59,89,610.00 (41.79%)	-	32,54,35,890.00
2015-16	11,06,22,958.00 (27.38%)	14,28,10,174.00 (35.35%)	15,05,88,338.00 (37.27%)	-	40,40,21,470.00
2016-17	18,37,01,722.00 (53.98%)	9,60,08,415.00 (28.21%)	6,06,23,204.00 (17.81%)	-	34,03,33,341.00
2017-18	12,70,45,826.00 (49.99%)	4,35,04,837.00 (17.12%)	8,35,85,590.00 (32.89%	-	25,41,36,253.00
Total	726057742 (26.51)	97,10,16,653.00 (35.46)	1,03,75,74,730.00 (37.89)	24,84,229.00 (0.09)	2,73,84,51,299.00 (100)

Source: EMRI audited statements of accounts.

Note : The figures in brackets are percentages

It is clear from the above table that during the period 2008-09 to 2017-18, out of the total grant received by the EMRI the percentage of NRHM grant was 35.46 per cent. The percentage of the government grant, opening balance and interest was 37.89, 26.51 and 0.09 per cent respectively. The table also shows that from the year 2008-09 to 2010-11 the EMRI had received interest from the bank but from the year 2011-12 to 2017-18 it had not received such interest from the Bank. Therefore the health department should try to find out the facts regarding the same.

Operational Expenditure of EMRI 108 Ambulances vis-à-vis other States

Table 5.25 shows per ambulance per month operational expenditure of the EMRI 108 ambulances vis-à-vis other states during the period from 2014-15 to 2017-18.

Table 5.25

Per Ambulance per Month Operational Expenditure of the EMRI 108 Ambulances vis-à-vis other States

Year	State-wise Per Ambulance Per Month Operational Expenditure (in Rs.)						
	Andhra Pradesh	Gujarat	Uttarakhand	Rajasthan	Madhya Pradesh	Himachal Pradesh	Uttar Pradesh
2014-15	1,19,671	1,07,515	1,23,976.29	-	-	-	-
2015-16	1,27,425	1,05,600	1,27,479.60	41,666	-	50,000	1,85,185
2016-17	1,53,842	1,18,860	1,24,293.42	41,666	69,444	50,000	1,85,185
2017-18	1,55,440	1,27,411	1,10,194.32	41,666	69,444	50,000	1,85,185
	1,39,095	**1,14,847**	**1,21,486**	**41,666**	**69,444**	**50,000**	**1,85,185**

Source: EMRI audited statements of accounts and information received from the states.

It is clear from the above table that from 2014-15 to 2017-18 the average per month per ambulance operational expenditure of EMRI was Rs 1,39,095 in Andhra Pradesh, Rs

1,14,847 in Gujarat and Rs 1,21,486 in Uttarakhand, Rs 41,666 in Rajasthan, Rs 69,444 in Madhya Pradesh, Rs 50,000 in Himachal Pradesh and Rs 1,85,185 in Uttar Pradesh. The Table also shows that per month per ambulance operational expenditure of EMRI in Uttarakhand is very high compared to Himachal Pradesh because the geographical location of Himachal Pradesh and geographical location of Uttarakhand is the same. Therefore, per month per ambulance operational expenditure should not exceed Rs. 50,000 / - in Uttarakhand. If the distance of destination place is more than 30 km in that condition an additional payment can be made at the rate of Rs. 8 per km as such a provision has been made in Himachal Pradesh.

2. **Evaluation of Work, Expenditure, Facilities available to the Beneficiaries in the light of MOU Signed between Department of Health and Family Welfare, Government of Uttarakhand and EMRI**

The main services provided by 108 emergency services are as follows:

➢ Free referral transport for all the emergency (medical, fire and police) cases.

➢ To provide patient stabilization, first aid services and other pre-hospital care during the emergency transportation.

➢ To provide free pick up to pregnant women and sick infants (0-1 year) under JSSK program.

➢ To improve the access to police, fire and healthcare services for the population of Uttarakhand.

The following Table 5.26 shows number of emergencies handled by the EMRI from the period 2008-09 to 2017-18.

Table 5.26

Number of Emergencies Handled by the 108 since Inception

Year	No. of Emergencies	%	Police	%	Fire	%	Total
2008-09	43881	(96.94%)	1376	(3.04%)	7	(.02%)	45264
2009-10	103221	(98.84%)	1195	(1.14%)	20	(0.02%)	104436
2010-11	113417	(96.84%)	3684	(3.15%)	18	(0.02%)	117119
2011-12	142826	(95.76%)	6302	(4.23%)	16	(0.01%)	149144
2012-13	148812	(96.10%)	6035	(3.90%)	-	-	154847
2013-14	155003	(95.85%)	6703	(4.15%)	-	-	161706
2014-15	160467	(95.87%)	6908	(4.13%)	-	-	167375
2015-16	165319	(96.11%)	6693	(3.89%)	1	(0.00%)	172013
2016-17	151719	(95.66%)	6886	(4.34%)	-	-	158605
2017-18	119116	(94.23%)	7289	(5.77%)	-	-	126405
Total	**1303781**	**(96.08%)**	**53071**	**(3.91%)**	**62**	**(0.00%)**	**1356914**

Source: EMRI head office Dehradun

It is clear from the above table that during the period from 2008-09 to 2017-18, a total of 1356914 emergency services were provided by EMRI. It is also clear from the table that out of the total services 96.08 per cent were related to emergency services, 3.91 percent police related services and remaining 62 services were related to fire extinguishing.

On the basis of the explanation described in the previous chapters it is clear that the EMRI has not been able to fulfil its commitment in accordance with the MOU signed with the government. The following points can be mentioned in this regard;

➢ In the agreement, it had been clarified that the EMIR will provide response services within 35 minutes in the rural areas and within 25 minutes in the urban areas but the EMRI has not been completely able to provide this sort of services as per the conditions of the agreement.

➢ According to agreement, it was ensured that the EMRI will make efforts to provide world class emergency services and will make constant efforts to bring excellence in their services. But the EMRI has not been successful either in providing the world class services nor has been able to improve the quality of services. In the performance of the EMRI, there is neither any innovation nor any strategic partnership as it was laid down in the agreement.

➢ As per rules, it is essential that the EMTs working in all the ambulances should have a medical qualification but when 30 sample ambulances were inspected there was no medical qualification with the three EMTs in the districts of Dehradun and Haridawar. A person with no medical qualification cannot discharge his duty to maintain the condition of the patient stable or to provide first aid. The EMRI has ignored it. In some situations, only a formality has been observed in respect of the training of EMTs.

➢ It was the responsibility of the EMRI to provide training to employees working in the ambulances. Although the EMRI has tried to impart training to its employees, only formalities have been played in this regard. Because the duration of training does not seem as long as was required.

> It was clarified in the agreement that the EMRI will try to reduce economic burden on the Uttarakhand government. But the EMRI has tried to put a lot of burden instead of giving financial help to the state government.

> During the study, it has been observed from some sample beneficiaries that they do not know the method of making call to 108. From this, it appears that EMRI has not played a significant role in creating awareness among the people about the scheme.

Difficulties/Suggestions of the Beneficiaries of 108 Ambulances/its Drivers and EMTs/and Board of Directors

On the basis of the information given by the sample beneficiaries, sample staff working in the sample ambulances and the EMRI board of directors working in Dehradun head office the main difficulties are discussed below.

(a) Difficulties of the Board of Directors

The main difficulty of the operating group has been described below. Timely non-payment of the TDS is the main problem of the operating group. Which has been discussed in the following table.

Table 5.27
Year-wise Deducted TDS Amount and refunded amount by the IT Department (in Rs.)

Year	Deducted amount of TDS	Refund of the Deducted TDS Amount by the IT Department	Balance of TDS Amount to be refunded by the IT Department
2008-09	-	-	-
2009-10	-	-	-
2010-11	-	-	-
2011-12	3582396	3582396	
2012-13	43215296	-	43215296
2013-14	29847740	-	29847740
Total	**76645432**	**3582396(4.67%)**	**73063036(95.33%)**

Source: EMRI head office Dehradun

It is clear from Table 5.27 that from the year 2008-09 to 2013-14, a total amount of Rs. 7,66,45,432 / - has been deducted from the grants-in-aid given to the EMRI during this period. Out of which Rs. 35,82,396 was paid by the Income Tax Department to EMRI. And the remaining Rs. 7,30,63,036/- has not been paid yet. It is also clear from the table that from the year 2008-09 to 2010-11, no amount of TDS was deducted by the government from the grants-in-aid given to the EMRI. In the year 2011-12, the deducted TDS amount has been paid by the Income-tax Department to EMRI. In the year 2012-13 and the year 2013-14 the deducted TDS amount has not been paid by the Income Tax Department to the EMRI.

The second problem of Operating group is related to the physical condition of the working ambulances and the machinery and equipments available in them. Based on the information given by the State Head during the study, it has been observed that 65 per cent of the total working ambulances are working for more than 8 years. Due to continuous service, their work capacity has reduced considerably. Due to which they often break down during service period as a result the EMRI was not able to provide quality service. Equipments and machinery available in the ambulances have been damaged due to continuous use and some of them are not in a position to work. Appropriate machinery and equipments costs the same amount of money for which new equipment can be purchased. In this context, the state government has not made any concerted effort to resolve the problem.

(b) Problems of the Staff Working the Ambulances

The main problem of employees working in 108 ambulances is that they are not satisfied with their services condition. The main reason is that they do not get proper wages after working for longer period. Thereby, a sense of alienation has arisen in them. The following table shows the average monthly salary of the drivers and EMTs working in the ambulances.

Table 5.28

Number of Employees/Average Monthly Cost to the Company and Components of Monthly Salary of the EMRI Dehradun

S. No.	Designation	No. of employees	Average Monthly Cost to Company(CTC) (Amount in Rs.)
1	State Head	001	1,00,000
2	Managers	003	68,889
3	Deputy Managers	002	49,802
4	Assistant Managers	007	51,786
5	Senior Executive & Executives	023	29,165
6	Senior Officers & Assistants	007	18,811
7	Emergency Response Centre Physician	002	56,210
8	Emergency Medical Technician	331	15,471
9	Pilot	313	14,987
10	Emergency Response Officer	028	10,923

Source: EMRI head office Dehradun

Components of monthly salary
Basic Pay
HRA
ATTENDANCE ALLOWANCE
Conveyance
Special Allowance/SPREAD OVER ALLOWANCE
Gross Salary
B) Rotational Benefits :
PF
PLI
ESIC
MEDICAL REIMBURSEMENT
LTA REIMBURSEMENT
FUEL REIMBURSEMENT
TELEPHONE REIMBURSEMENT
FOOD COUPON
DRIVER REIMBURSEMENT
Gratuity
GPA + GTLI + GMI (Insurance)
TOTAL CTC

The salaries of the EMTS and drivers working in 108 ambulances do not appear to be in consonance with the work performed by them. They have to work for a long period on a lower salary which has created a sense of alienation among them.

It is also clear from the above table that EMTs and drivers get cash salary between Rs. 10,000 and Rs. 12000 per month. Although the Table shows that the average monthly salary of the drivers according to cost to the company is Rs. 14,987. But his salary is deducted every month on the above salary heads so that he does not receive the full amount of his salary as based on the company's average monthly salary. Similarly the EMT does not get monthly salary as per the cost to the company. The salary amount is being deducted under different salary heads every month.

(c) Problems of the Beneficiaries

From the employees working in the ambulances and information given by the sample beneficiaries it has been found that a lot of delay occurs in hospitalizing the patient. At times the patient is refused admission in the hospital. In such a situation the ambulance has to wait for a long time and if during that period a call from some other patient is received, that patient is not taken to the hospital unless and until the first patient gets the desired admission. As a result of this, the second patient is deprived of the services of 108 or he has to wait for a long period.

Due to the breaking down of the ambulances during the service period, the patient has a lot of delay in reaching the hospital. On basis of the information given by the sample beneficiaries of the sample districts, the problem faced by them in reaching hospitals is shown in the Table 5.29.

Table 5.29

District-wise Number of Beneficiary Reported Delay in Reaching Hospital Due to break down of the Ambulance on the Way

District	Yes	%	No	%	Total
Bageshwar	337	66.60	169	33.40	506
Dehradun	243	47.83	265	52.17	508
Haridwar	301	59.96	201	40.04	502
Nainital	175	34.93	326	65.07	501
Rudraprayag	352	69.84	152	30.16	504
U.S. Nagar	300	60.00	200	40.00	500
Total	**1708**	**56.54**	**1313**	**43.46**	**3021**

It is clear from the above Table that out of a total of 3021 the sample beneficiaries, 1708 (56.54 %) beneficiaries had to face problems in getting admission into the hospital in the absence of ambulance. The district-wise data shows that the percentage of beneficiaries who faced such problem ranged between 34.93 to 69.84 per cent, maximum 69.84 percent in Rudraprayag district and minimum 34.93 percent in Nainital district.

The lack of the women EMTs in the ambulances is the main problem of the women beneficiaries. At present, the number of female EMTs is negligible. When a woman's delivery takes place in the ambulance and male EMT renders services to the rural woman, in that condition the rural woman feels reluctant.

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CHAPTER-6

Main Conclusions and Recommendations

In the previous chapters the different aspects to this study have been examined and analyzed at length in the light of information gathered and field data collected for the study. However, in order to make an overall view and assessment of the study, some of the main conclusions and recommendations emerging from the study are briefly produced below.

Key findings:

1. Based on the social and economic analysis of the sample beneficiary respondents, out of 3021 sample beneficiary respondents, 1530 (50.65%) were above the poverty line and the remaining 1491 (49.35%) were living below the poverty line.

2. Out of a total of 3021 sample beneficiary respondents, 2121 (70%) were females related to pregnancy cases who benefited from this scheme.

3. Out of a total of 3021 sample beneficiary respondents, 2322(76.86%) were young (those falling in the age range of 18 to 35 years), 514(17.01%) were middle aged (those falling in the age range of 36 to 55 years), 171(5.66%) were old (those having cross the age of 55 years) and the remaining 14(0.46%) were children (those falling below the age of 18 years).

4. Out of a total of 3021 sample beneficiaries, 1165(38.56%) beneficiaries received the services of 108 ambulances within 30 to 40 minutes after the phone call, 794(26.28%) within 20 to 30 minutes, 470(15.56%) within 40 to 50 minutes, 371(12.28%) within 10 to 20 minutes, 111(3.67%) more than 50 minutes after the phone call and remaining 110(3.64%) within 5 to 10 minutes.

5. In the hilly Bageshwar and Rudraprayag districts, 83(16%) and 219 (43%) sample respondents received the services of 108 Ambulances more than 40 minutes after phone call by the beneficiaries. 61.6%, 28.68%, 61% and 44.7% sample respondents of Dehradun, Haridwar, Udhamsinghnagar and Nainital (both urban and rural areas) respectively received the services of 108 Ambulances more than 30 minutes after phone call. In the agreement, it had been clarified that the EMIR will provide response services within 35 minutes in the rural areas and within 25 minutes in the urban areas but the EMRI has not been completely able to provide this sort of services as per the conditions of the agreement.

6. Out of a total of 30 sample EMTs, 4(13.33%) had received a training of three months, 1(3.33%) received training for a period of six months, 11(36.67%) for two months the remaining 14(46.67%) had received a training for the period from 5 to 30 days. The EMTs of other districts except Haridwar and Nainital were not trained for more than 3 months, whereas the EMTs of Bageshwar district are working since 5 to 7 years and the EMTs of Dehradun and Rudraprayag are working since 3 to 7 years. This is evident from the fact that only formalities were played in this context of training of EMTs by EMRI. In such a short period, an EMT cannot be capable to discharge his duties; it is matter of consideration.

7. Out of a total of 30 sample ambulances, in 27(90%) ambulances there were male EMTs and in the remaining 3(10%) there were female EMTs. In the matter of female delivery in the ambulance and in providing proper service to the female patient, women EMT should have been given priority.

8. Out of a total of 3021 sample beneficiaries, 1165(38.56%) beneficiaries received the services of 108 ambulances within 30 to 40 minutes after the phone call, 794(26.28%) within 20 to 30 minutes, 470(15.56%) within 40 to 50 minutes, 371(12.28%) within 10 to 20 minutes, 111(3.67%) more than 50 minutes after the phone call and remaining 110(3.64%) within 5 to 10 minutes. It shows that the EMRI was not able to fulfil its commitments as per the agreement.

9. Out of a total of 3021 sample beneficiaries, 2833(93.78%) beneficiaries found both driver and EMT present in the 108 ambulances while the remaining 188(6.22%) beneficiaries found only the driver present in the ambulances. In Haridwar, Nainital, Udhamsingh Nagar and Bageshwar districts 163(32.47%), 12(2.40%), 11(2.20%) and 2(0.40%) sample beneficiaries respectively found only drivers in their ambulances during service, and this is a very worrying subject. While the presence of EMTs is compulsory in every ambulance. It shows that EMRI has failed to ensure the continuous availability of employees during operational period of the ambulances.

10. In the context of the use of machinery/equipments available in the ambulances, it was found in the districts Bageshwar, Dehradun, Haridwar, Nainital, Rudraprayag and Udhamsinghnagar, some equipments like oxygen kit, automated blood pressure apparatus and glucose meter which is very essential for the life of the patient, were not found in complete operational condition and even the maintenance thereof was not found to be satisfactory. Excluding Dehradun district, in other districts the sheets and

pillows provided on the stretcher were not found to be clean. This shows that the cleanliness was not taken a special care. Whereas in the repair and maintenance of the ambulances from the year 2008-09 to 2013-14, the EMRI has spent between 20 to 40 lakh rupees for repair and maintenance. Therefore, despite the responsibility of the repair and maintenance of the EMRI, this important task was ignored by the organization.

11. Out of a total of 3021 sample beneficiaries, 1803(59.68%) beneficiaries considered the behaviour of the employees present in 108 ambulances as good, 755(24.99%) as satisfactory, 461(15.26%) very good and the remaining 2(0.07%) beneficiaries of the Haridwar and Rudraprayag districts did not consider the behaviour of the employees present in 108 ambulances as satisfactory.

12. Out of a total of 3021 sample beneficiaries, 2754(91.16%) beneficiaries got the information regarding the services of 108 ambulances from their friends/relatives/neighbours, 149(4.93%) through Aasha/ANM, 101(3.34%) from the newspapers/TV and the remaining 17(0.56%) from the information displayed on the walls. It shows that no satisfactory efforts have been made by the EMRI regarding the awareness campaign of the scheme because only 4 per cent of the sample beneficiaries came to know about the scheme through awareness campaign.

13. During the period years 2008-09 to 2013-14, total expenditure of the EMRI on repair and maintenance was between 1.39 to 2.73 per cent out of total operational expenditure. But out of a total of 3021 sample beneficiary respondents, 1708(56.54%) reported that their ambulances had gone out of order during their services.

14. If the administrative expenditure of the EMRI was calculated against operational expenditure from the year 2008-09 to 2017-18, it was between 2.85 and 9.59 per cent, maximum 9.59 per cent in the year 2011-12 and minimum 2.85 per cent in the year 2017. If average administrative expenditure was calculated in the said 10 years, then it was 5.71 percent of operational expenditure.

15. The operational expenditure of the EMRI was 64.75 per cent out of grant-in-aid received between 2008-09 and 2017-18. In the year 2009-10, the operational expenditure on the number of 108 ambulances was 65.23 per cent of the total grant-in-aid and for the same number of ambulances it was 89.77 per cent of the total grant-in-aid in the year 2010-11. Similarly, in the year 2011-12, for 140 ambulances the total operational expenditure of the EMRI

was 86.30 per cent of the total grant-in-aid and for the same number of ambulances it was 62.04 per cent of the total grant-in-aid in the year 2013-14. Therefore there is no logical equation between the number of ambulances and the operational expenditure. Since the number of ambulances has not increased, the operational expenditure has increased steadily.

16. An analysis of the administrative expenditure of EMRI has shown that administrative expenditure has increased steadily up to the year 2011-12. Administrative expenditure increased by 155.54 per cent in the year 2011-12, compared to the year 2008-09 and administrative expenditure after 2011-12 has decreased compared to the previous years.

17. During the period from 2008-09 to 2017-18 out of the total operational expenditure the percentage of administrative expenditure of the EMRI was between 2.85 per cent to 9.59 per cent. It was highest 9.59 per cent in the year 2011-12 and the lowest 2.85 per cent in the year 2017-18

18. During the period from 2008-09 to 2017-18 out of the total grant in aid the capital expenditure of the EMRI was 6.35 per cent. Compared to the year 2008-09, the capital expenditure of EMRI has decreased by 99.98 per cent in the year 2017-18 and operational expenditure has increased by 103.64 per cent. On the contrary, in comparison to 2008-09, the administrative expenditure has decreased by 18.18 per cent in the 2017-18.

19. During the period 2008-09 to 2017-18 per ambulance per month operational expenditure of the EMRI was between Rs. 85,977.43 and Rs. 1,27,479.60, maximum Rs. 1,27,479.60 in the year 2015-16 and minimum Rs. 85,977.43 in the year 2008-09. If the average per ambulance per month operational expenditure is calculated from the year 2008-09 to 2017-18, then it is Rs. 1,12,369.29. In the year 2009-10 to 2010-11, per ambulance per month expenditure increased by 20.78 percent, whereas the number of ambulances was the same. Similarly, in the year 2012-13 to 2013-14 per ambulance per month expenditure increased by 8.42 per cent whereas from the year 2016-17 to 2017-18 per ambulance per month operational expenditure decreased by 11.34 per cent on the same number of ambulances. It can be tested at the level of the health department.

20. If the utility of funds and excess amount is analyzed from the year 2008-09 to the year 2017-18, it has been observed that from 6.06 to 45.47 per cent of the total received grant remained untouched by the EMRI, maximum 45.47 per cent in 2015-16 and minimum

6.06 per cent in 2010-11. The excess amount of each financial year remains in the bank account of EMRI. The excess amount of each financial year is not returned to the state government, but the amount is being added in the grants-in-aid of the next financial year.

21. During the period 2008-09 to 2017-18, out of the total grant received by the EMRI the percentage of NRHM grant was 35.46 per cent. The percentage of the government grant, opening balance and interest was 37.89, 26.51 and 0.09 per cent respectively.

22. From 2014-15 to 2017-18 the average per ambulance per month operational expenditure of EMRI was Rs 1,39,095 in Andhra Pradesh, Rs 1,14,847 in Gujarat, Rs 1,21,486 in Uttarakhand, Rs 41,666 in Rajasthan, Rs 69,444 in Madhya Pradesh, Rs 50,000 in Himachal Pradesh and Rs 1,85,185 in Uttar Pradesh. It shows that the average per ambulance per month operational expenditure of the EMRI in Uttarakhand is higher than other states like Himachal Pradesh, Madhya Pradesh and Gujarat.

23. It is also observed that per ambulance per month operational expenditure of EMRI in Uttarakhand is very high compared to Himachal Pradesh because the geographical location of Himachal Pradesh and geographical location of Uttarakhand is the same. Therefore, per ambulance per month operational expenditure should not exceed Rs. 50,000 / - in Uttarakhand. If the distance of destination place is more than 30 km, in that condition an additional payment can be made at the rate of Rs. 8/- per km as such a provision has been made in Himachal Pradesh.

24. According to agreement, it was ensured that the EMRI will make efforts to provide world class emergency services and will make constant efforts to bring excellence in their services. But the EMRI has not been successful in providing world class services. It has also not been able to improve the quality of services. In the performance of the EMRI, there is neither any innovation nor any strategic partnership as was laid down in the agreement.

25. If during the service any ambulance becomes out of order it has a negative effect on the services because the other ambulance could not be available immediately for the patients at the proper time. It appears that the EMRI has not made necessary alternative arrangements to deal with such problems. On the basis of information given by sample beneficiaries, out of a total of 3021 beneficiaries, 1708(56.54%) had to face the said problem. If district-wise analysis is done, 66.60 per cent beneficiaries of Bageshwar district, 47.83 per cent beneficiaries of Dehradun district, 59.96 per cent beneficiaries of

Haridwar district, 34.93 per cent beneficiaries of Nainital district, 69.84 per cent beneficiaries of Rudraprayag district and 60 per cent beneficiaries of Udham Singh Nagar district had to face same problem.

26. The main problem of employees working in 108 ambulances is that they are not satisfied with their service condition. The main reason is that they do not get proper wages even after working for longer period. Thereby, a sense of alienation has arisen in them. Sometimes they even have to work for more than 8 hours.

27. It has been observed through the Dehradun office of the EMRI that majority of the working ambulances are not in proper condition due to their continuous service. Their work capacity has reduced considerably due to which they often break down during service period as a result, the operating group has to face many problems to provide quality service to the beneficiaries.

Suggestions:

Based on the findings of the study, the following suggestions are given for successful operation of the scheme: -

1. There is a tremendous need to develop a monitoring system by the state health department for the transparency of operational expenditure made by the EMRI.

2. There is a need to ensure continuous monitoring of ambulances and machinery and equipments kept in them in proper working condition so that the patients may get timely healthcare facilities and keeping in view the field situation the difficulty experienced in the operation of the scheme can be overcome.

3. It is necessary to establish a logical ratio between the number of 108 ambulances and operational expenditure. Operational expenditure should be determined based on the number of ambulances. Prior to providing grants-in-aid to EMRI in the future, the past expenditure incurred in various items needs to be reviewed.

4. Keeping in mind the delivery of women/pregnancy, there is a need for improved delivery and treatment system in the ambulances so that women of remote/ rural areas can get more benefit from this scheme.

5. EMRI has not kept any details of the district-wise and ambulance-wise operational expenditure in the past. Hence the health department should give instructions to EMRI

to give monthly and annually details of operational expenditure district-wise and vehicle-wise in future. The health department should also ensure monthly analysis of the same.

6. Women EMT are found in very few numbers in these ambulances. During ambulance delivery or in case of first aid requirement by women, men E.M.T are not preferred by women. Therefore capable Women EMT of prescribed eligibility should be appointed in future.

7. Considering the geographical location of the state, the number of present ambulances appears to be less. In such a district where the population is more or such development block where the facility of traffic is not satisfactory, the number of additional 108 ambulances should be increased in order to provide accidental medical facilities to the people from far off places.

8. The role of the Advisory Committees in all the districts does not seem adequate in monitoring the scheme in their respective districts. Hence, it becomes mandatory to make observer's role performed by advisory committee more answerable and effective.

9. EMRI is a non-profit organization. Therefore, all information should be mentioned in the portal of the organization (list of beneficiaries, post and number of personnel and income-expenditure, fulfilled works etc.) in order to maintain transparency regarding its modus operandi and activities.

10. The Department of Health and Family Welfare should send instructions to all government and non-government hospitals in the state to admit all patients of EMRI 108 ambulances without any delay.

11. EMRI should be instructed to spread awareness about the scheme through campaigns in rural/ backward areas.

12. The working hours of the employees working in the ambulances should be determined according to the rules and they should be given logical pay as per their length of service so that they can serve the patient without being isolated.

13. Only those who have the requisite qualifications should be appointed to the post of EMT.

14. The ambulances should not be brought into operation after a fixed kilometre walk, so that patients may not suffer and they can avail medical facility without any interruption.

15. Complaint number, names of nearby hospitals and their phone numbers should be mentioned in 108 ambulances. This would help patients in getting maximum benefits.

16. If information regarding distance of ambulance from their place and its arrival time becomes available to the patients via Mobile App, it would prove beneficial both for the patient and their family members. In this regard, if possible, State can further think about creating and running such a Mobile App.

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Annexure No. 01

District/Block-Wise Number of Sample Beneficiaries Selected for the Study

District	Name of the Block	Ambulance Delivery	Heat related Problems	Road Accident	Stomach and Other Problems	Women Delivery	Total
A. Bageshwar	Bageshwar	20	7	22	30	265	**344**
	Garur	15	23	22	15	39	**114**
	Kapkot	17	20	6	5	-	**48**
	Total	**52**	**50**	**50**	**50**	**304**	**506**
B. Dehradun	Doiwala	37	12	34	31	230	**344**
	Kalsi	2	21	-	14	18	**55**
	Raipur	2	5	-	-	2	**9**
	Sahaspur	6	5	-	-	25	**36**
	Vikas Nagar	6	9	16	5	28	**64**
	Total	**53**	**52**	**50**	**50**	**303**	**508**
C. Haridwar	Bahadrabad	2	13	3	-	63	**81**
	Bhagwanpur	25	7	22	30	75	**159**
	Khanpur	5	6	10	6	20	**47**
	Narsan	16	5	15	11	40	**87**
	Roorkee	4	19	-	3	102	**128**
	Total	**52**	**50**	**50**	**50**	**300**	**502**
D. Nainital	Betalghat	4	-	6	5	49	**64**
	Bhimtal	8	11	6	8	58	**91**
	Dhari	4	-	6	11	36	**57**
	Haldwani	15	23	21	15	48	**122**
	Kotabagh	3	9	2	3	25	**42**
	Okhalkanda	3	-	5	-	9	**17**
	Ramgarh	8	-	1	2	18	**29**
	Ram Nagar	5	7	4	6	57	**79**
	Total	**50**	**50**	**51**	**50**	**300**	**501**
E. Rudraprayag	Augustmuni	36	42	50	43	236	**407**
	Jakholi	9	2	1	5	52	**69**
	Ukhimath	5	7	-	2	14	**28**
	Total	**50**	**51**	**51**	**50**	**302**	**504**
F. Udham Singh Nagar	Bazpur	-	-	2	2	4	**8**
	Gadarpur	-	-	4	4	27	**35**
	Jaspur	-	-	-	1	29	**30**
	Kashipur	-	-	9	3	49	**61**
	Khatima	-	-	1	21	30	**52**
	Rudrapur	50	50	34	13	122	**269**
	Sitarganj	-	-	-	6	39	**45**
	Total	**50**	**50**	**50**	**50**	**300**	**500**
Grand Total (A+B+C+D+E+F)		**307**	**303**	**302**	**300**	**1809**	**3021**

Annexure-02

List of the Drivers and EMT In The Sample Districts Who were Interviewed.

S. No.	Name	Position	Ambulance No.	Mobile No.	Block	District
1.	Vishav Deepak	EMT	UK-07GA-0626	9457479890	Doiwala	Dehradun
2.	Virendra Rawat	Driver	Do	-	Do	Do
3.	Neeraj Sharma	EMT	UK-07GA-0607	8864816055	Sahaspur	Dehradun
4.	Asgar Ali	Driver	UK-07GA-0607	-	Sahaspur	Dehradun
5.	Sheesh Pal	EMT	UK-07GA-0607	9456367108	Sahaspur	Dehradun
6.	Manjeet Singh Negi	Driver	UK-07GA-0607	-	Sahaspur	Dehradun
7.	Vinod Singh	EMT	UK-07GA-0614	7895514998	Doiwala	Dehradun
8.	Jawahar Singh	Driver	Do	-	Doiwala	Dehradun
9.	Rohit Rawat	EMT	UK-07GA-0531	9917991527	Vikas Nagar	Dehradun
10.	Saleem	Driver	Do	-	Vikas Nagar	Dehradun
11.	Kuldeep Singh	EMT	UK-07GA-0639	8923411242	Doiwala	Dehradun
12.	Mukesh Kumar	Driver	Do	-	Doiwala	Dehradun
13.	Jitendra Bhatt	EMT	UK-07GA-0634	9758011571	Doiwala	Dehradun
14.	Mukesh	Driver	Do	-	Doiwala	Dehradun
15.	Nirdosh Kumar	EMT	UK-07GA-0248	8392945075	Bhagwanpur	Haridwar
16.	Surendra Singh	Driver	Do	-	Bhagwanpur	Haridwar
17.	Dinesh Singh	Driver	UK-07GA-230	-	Roorkee	Haridwar
18.	Pradeep Semwal	EMT	UK-07GA-230/208	9058816405	Roorkee	Haridwar
19.	Mukesh Singh	EMT	UK-07GA-0601	8392945114	Bahadrabad	Haridwar
20.	Vinod	Driver	Do	-	Bahadrabad	Haridwar
21.	Suraj Rangar	EMT	UK-07GA-0225	-	Khanpur	Haridwar
22.	Rocky	Driver	Do	-	Khanpur	Haridwar
23.	Sandeep Kumar	Driver	UK-07GA-164	-	Narsan	Haridwar
24.	Keshav Singh	EMT	UK-07GA-164	8449041937	Narsan	Haridwar
25.	Kushlanand	EMT	UK-07GA-0245	972077453	Rudraprayag City	Rudraprayag
26.	Jagdish	Driver	UK-07GA-0245	-	Rudraprayag City	Rudraprayag
27.	Maheep Kumar	EMT	UK-07GA-0529	9758035357	Augustmuni	Rudraprayag
28.	Anup Kumar	Driver	UK-07GA-0529	-	Augustmuni	Rudraprayag
29.	Pramod Bhatt	EMT	UK-07GA-0542	8475027108	Rudrapur	Udhamsingh Nagar
30.	Ravi Datt Sati	Driver	UK-07GA-0542	-	Rudrapur	Udhamsingh Nagar
31.	Neeraj	EMT	UK-07GA-0637	7500492355	kichha	Udhamsingh Nagar

S. No.	Name	Position	Ambulance No.	Mobile No.	Block	District
32.	Lalit Mohan	Driver	UK-07GA-0637	-	Kichha	Udhamsingh Nagar
33.	Asha	EMT	UK-07GA-0249	7500621801	Gadarpur	Udhamsingh Nagar
34.	Raghunath Singh	Driver	Do	-	Gadarpur	Udhamsingh Nagar
35.	Shiv Charan Sharma	EMT	UK-07GA-0609	8392945130	Kashipur	Udhamsingh Nagar
36.	Ajay	Driver	Do	-	Kashipur	Udhamsingh Nagar
37.	Pramod Gupta	EMT	UK-07GA-0242	8392945077	Jaspur	Udhamsingh Nagar
38.	Rakesh	Driver	Do	-	Jaspur	Udhamsingh Nagar
39.	Rohit Parihar	EMT	UK-07GA-0161	8392945112	Kapkot	Bageshwar
40.	Puran Chandra Pandey	Driver	UK-07GA-0161	-	Kapkot	Bageshwar
41.	Naveen Chandra Papnai	EMT	UK-07GA-0241	9761376365	Bageshwar	Bageshwar
42.	Pankaj Singh Karki	Driver	Do	-	Bageshwar	Bageshwar
43.	Mahesh Chandra Tiwari	EMT	UK-07GA-0115	8392945027	Garur	Bageshwar
44.	Vinod Chandra	Driver	Do	-	Garur	Bageshwar
45.	Mangal Ram	EMT	UK-07GA-0231	9917177421	Kota Bagh	Nainital
46.	Ranjeet	Driver	Do	-	Kota Bagh	Nainital
47.	Birendra	EMT	UK-07GA-533	9456535492	Bhimtal	Nainital
48.	Anand Singh Bisht	Driver	Do	-	Bhimtal	Nainital
49.	Lalit Mohan	EMT	UK-07GA-0539	9675584646	Dhari	Nainital
50.	Pappu Chand	Driver	Do	-	Dhari	Nainital
51.	Anju Arya	EMT	UK-07GA-0576	9410518673	Haldwani	Nainital
52.	Rajendra Singh	Driver	Do	-	Haldwani	Nainital
53.	Radha Bisht	EMT	UK-07GA-0617	9720080689	Nainital City	Nainital
54.	Kishnanad	Driver	Do	-	Nainital City	Nainital
55.	Deepak Kumar Pant	EMT	UK-07GA-0157	7088524980	Betal Ghat	Nainital
56.	Tara Singh	Driver	Do	-	Betal Ghat	Nainital
57.	Virendra Singh	EMT	UK-07GA-10218	9645683898	Ram Nagar	Nainital
58.	Vinod Singh	Driver	Do	-	Ram Nagar	Nainital
59.	Mangal Ram	EMT	UK-07GA-0231	9917177421	Kaladhungi	Nainital
60.	Ranjeet	Driver	Do	-	Kaladhungi	Nainital

Annexure-03

List of the District Level Official Respondents

S. No.	Name	Position	Block/Area	District
1.	Dr. Nitin Singh kahera	BPM	Doiwala	Dehradun
2.	Dr. Virendra Kanti	BPM	Sahaspur	Dehradun
3.	Dr. Meghana	DPM	Prem Nagar	Dehradun
4.	Dr. Anju Bala	DCMO	Doiwala	Dehradun
5.	Pradeep Negi	BPM	Vikas Nagar	Dehradun
6.	Dr. U.S Chauhan	DCMO	Dehradun City	Dehradun
7.	Dr. Gaurav	BMO	Kapkot	Bageshwar
8.	Laxman Singh Jaswal	CMO		Bageshwar
9.	Sami Unnisha	DCMO		Bageshwar
10.	Dr. Ajay Veer Singh	Hospital Manager	Rudrapur	Udhamsingh Nagar
11.	Rudra Pratap Singh	BPM	Kichha	Udhamsingh Nagar
12.	Dr. Suresh	BMO	Gadarpur	Udhamsingh Nagar
13.	Dr. Sanjay	BMO	Jaspur	Udhamsingh Nagar
14.	Dr.K.S Bisht	CMO		Rudraprayag
15.	Dr. Ashutosh Kumar	DPPM	August Muni	Rudraprayag
16.	Sanjeev Bharadwaj	BPM	Bhagwanpur	Haridwar
17.	Ravindra Thapliyal	BPM	Roorkee	Haridwar
18.	Dr. Jyoti Bohra	BMO	Bahadrabad	Haridwar
19.	Dr. Bhawani Pal	DCMO	Bahadrabad	Haridwar
20.	Amit Mishra	DPPM	Kaladhungi	Nainital
21.	Dr. M Singh	BMO	Bhimtal	Nainital
22.	Dr. Deepak Kumar	MO	Dhari	Nainital
23.	Dr. Bhagirathi Josi	CMO	Nainital City	Nainital

Annexure-04

List of the Public Representative (Janpratinidhi)

S. No.	Name	Father's/Husband's Name	Block/Area	District
1.	Dhyan Singh	Brahm Singh	Doiwala	Dehradun
2.	Maya Devi	Ghanshyam	Kalsi	Dehradun
3.	Poonam Pokhariyal	Ravindra Pokhariyal	Doiwala	Dehradun
4.	Ramesh Sharma	Buddhi Ram	Kalsi	Dehradun
5.	Gita Devi	Pramod Kumar	Doiwala	Dehradun
6.	Kiran Bala	Anil Pal	Doiwala	Dehradun
7.	Shashi Panauli	Mohan Chandra Panauli	Doiwala	Dehradun
8.	Saroj Singh Pundir	Prem Singh Pundir	Doiwala	Dehradun
9.	Umed Bora	Pratap Singh Bora	Doiwala	Dehradun
10.	Suraj Singh	Niranjan Singh	Dhari	Nainital
11.	Brijesh	Hemchand	Bhimtal	Nainital
12.	Chandan Singh Negi	Jaman Singh Negi	Haldwani	Nainital
13.	Kamala Devi	Chandra Pal	Kotabagh	Nainital
14.	Basnti Devi	Harish Ram	Betal Ghat	Nainital
15.	Saloni Yadav	Rajiv Yadav	Kaladhungi	Nainital
16	Gopal Ram Arya	Ram Lal	Kaladhungi	Nainital
17.	Minakshi Jantwal	Kundan Singh	Kotabagh	Nainital
18.	Dinesh Arya	Prakash Arya	Haldwani	Nainital
19.	Shanti Devi	Devendra Kumar	Bhimtal	Nainital
20.	Mohan Chandra Pandey	Ram Datt Pandey	Bageshwar	Bageshwar
21.	Bishan Singh Khetwal	Lal Singh Khetwal	Chhati	Bageshwar
22.	Shraswati Devi	Mohan Ram	Dewal Chaura	Bageshwar
23.	Indra Devi	Ganesh Ram	Majiha Khet	Bageshwar
24.	Prema Mehta	Anand Singh	Anrasa	Bageshwar
25.	Riyasat Ali	Yasin	Bahadrabad	Haridwar
26.	Savita Saini	Brijesh Saini	Roorkee	Haridwar
27.	Moh. Asim	Abdul Majeed	Roorkee	Haridwar

S. No.	Name	Father's/Husband's Name	Block/Area	District
28.	Vaidhwati	Satish Saini	Bhagwanpur	Haridwar
29.	Muskan Ahmad	Latim Ahmad	Bhagwanpur	Haridwar
30.	Abdul Sartar	Jakriya	Narsan	Haridwar
31.	Mohhmad Azaj	Mohhmad Inaam	Roorkee	Haridwar
32.	Kaki	Suresh Kumar	Narsan	Haridwar
33.	Nasim	Raham Ilai	Roorkee	Haridwar
34.	Nirmala Singh	Gurvindar Singh	Jaspur	Udhamsingh Nagar
35.	Meena Devi	Siya Ram	Kashi Pur	Udhamsingh Nagar
36.	Mamta Joshi	Sandeep Joshi	Kashi Pur	Udhamsingh Nagar
37.	Sudarsan Singh	Kamal jeet Singh	Sitar Ganj	Udhamsingh Nagar
38.	Shanti	Vijay	Kashi Pur	Udhamsingh Nagar
39.	Bhagwati Devi	Raj Pal	Gadarpur	Udhamsingh Nagar
40.	Vinod Yadav	Ram Vachan Yadav	Gadarpur	Udhamsingh Nagar
41.	Indra Bhatt	Gopal Datt	August Muni	Rudraprayag
42.	Savitri Devi	Kishan Singh	Jakholi	Rudraprayag
43.	Indra Datt	Surendra	Rudraprayag City	Rudraprayag

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