SUMMARY OF ORGANIZATION

EMRI-Establishment

Emergency Management and Research Institute (EMRI) is a non-profit organization established in April, 2005 with an aim of providing comprehensive emergency response services (Medical, Police and Fire). EMRI ‘integrates’ many resources and provides sustainable round the clock safety to citizens in a timely and effective manner through three contiguous sectors- SENSE (Communication and Dispatch - collects the facts about the emergency and assign the strategically located vehicle), REACH (Transport of vehicle to reach the site) and CARE (Providing the Pre-hospital care while transporting the patient/victim to the Hospital for stabilization).

EMRI is professionally managed, has proven technology and software and offers an integrated total turnkey solution. EMRI has been successfully operating in the Public Private Partnership (PPP) model.

The Institute was founded and funded by Raju brothers of Satyam Computers.

EMRI was allotted a three-digit number 108 by Government of India at the request of Government of Andhra Pradesh and made it toll-free across the State for all emergencies and can be accessed from land line and mobile line without prefixing area code.

EMRI, apart from providing emergency management, conducts research related to emergencies and offers various Emergency Management Training programs. EMRI has made progress in Emergency Research and Training and offers a 2 year full time residential Post Graduate Program in Emergency Care and for fulfilling this purpose it has partnered with Stanford University, USA the world’s leading Research and Teaching Institute.

EMRI’s Vision is to respond to one million calls a day, and save one million lives a year nationally by 2010 meeting global standards in Emergency Management and Research and Training.

Values are:

- Involving people
- Applying knowledge
- Making things happen
EMRI- Physical Infrastructure - Andhra Pradesh

EMRI is located in Secunderabad on the National Highway No 7 in 37 acres area in an approximate built up area of 90,000 Square feet.

Emergency Response Centre: State of Art Emergency Response Centre is built up with seating capacity for 76 Communication and dispatch Officers in a 10,000 Square feet area with a roof height of 22’ and direct daylight.

IT infrastructure includes High end Fully automated PBX / Telecom Switch, Computer Telephony Integration (CTI) Server, Call Center Server (CCS), Voice loggers, Interactive Voice Response System

Jim O Page Block - Training facility in 13500 Square feet with air-conditioned class rooms for Post Graduate Program in Emergency Care with all modern audio video equipments and all facilities for Instructions.

A dining Hall which accommodates 150 employees at a time is available in a built up area of 3000 Square feet.
EMRI Ambulances – Their Deployment in Andhra Pradesh and Gujarat States

EMRI has a fleet of 502 Ambulances (500 more to be added during 2008-2009) deployed in Strategic locations to reach victim to the nearest hospital in emergency in least possible time and providing Pre-Hospital Care. There are thee types of Ambulances-Advanced Life Support (ALS), Basic Life Support (BLS) and Life Support (LS). EMRI ambulances are designed keeping in view Patient care, Public Safety and Attendants comfort.

EMRI ambulance has unique features like low loading height easy to load a automatic loading stretcher, economic fuel consumption, Turbo engine, adequate space for patient compartment, turning radius most suitable for Indian conditions etc.

Fabrication with Fiber Reinforced Plastic (FRP) ensures Thermoregulation, Fire resistance, noise regulation.

Ergonomic design, space management ensures adequate space in patient cabin, safety mechanism with help of restrains, locking mechanism for all equipment, avoiding sharp edges.

Enough provision is made for waste disposal separately for bio hazardous and non bio hazardous.

Power supply is provided for medical equipment with 220 volts A.C and 12 volts DC also. Sufficient battery backup is provided. Facility to charge the battery from an external charge port is provided in case the battery in the ambulance is drained out.

Patient’s Compartment is air conditioned with insulated walls. Oxygen supply is provided with the help of bulk oxygen cylinders with a well built manifold system to provide uninterrupted Oxygen supply for more than 8 hours.

High intensity unique Sirens and public addressing system ensure communication with public.
### AP - EMRI-Ambulances deployment

<table>
<thead>
<tr>
<th>By end of DEC 2005</th>
<th>June 2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>On 15 August 2005, EMRI started its operations. Up to 31^st^ Dec 2005 covered 5 towns with its 30 Ambulances covering a population of 1.5 crore.</td>
<td>By June 2006 covered 45 more towns of AP by adding 40 more ambulances (Total 70 ambulances in 50 towns – 2.5 Crore population.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>March 2007</th>
<th>April –October, 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>By March 2007 number of ambulances increased to 100 and they started going into Mandals and villages of AP for providing its services thus covering a population of 3 Crores.</td>
<td>By October 2007, total number of ambulances deployed are 502, covering the entire state-urban &amp; rural- and the population covered is 8 Crores-500 more to be added before August, 2008</td>
</tr>
</tbody>
</table>

### Gujarat - EMRI--Ambulances deployment

<table>
<thead>
<tr>
<th>August 2007</th>
<th>November 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>On 29^th^ August 2007, the Emergency Response Services were launched in Gujarat beginning with Cities of Ahmedabad, Gandhi Nagar and related highways with 14 ambulances covering a population of 60 lakhs.</td>
<td>On 2^nd^ October the Emergency Response Services were launched in 13 cities in 5 districts of Gujarat with 45 ambulances thus covering a population of 1.8 Crores. As on today 79 ambulances serve 19.6 million population covering 61 towns and 13 districts-71 more to be added before March, 2008-total by then would be 150.</td>
</tr>
</tbody>
</table>
EMRI - Partnerships and alliances

National and International alliances and partners that contributed EMRI in its successful implementation of Emergency Response Services in the State of Andhra Pradesh are:

- **Satyam - Technology Partner** - Satyam as the Technology Partner helped EMRI to develop an emergency response system using Microsoft Technologies for automating all its activities.

- **Indian Emergency Number Authority (IENA)** - A National authority, Indian Emergency Number Authority (IENA) that enables and regulates comprehensive emergency response systems for transforming emergency management in India through public-private partnership with non-profit franchises.

- **National Emergency Number Association (NENA)** is the “Voice of 9-1-1”, a non-profit membership association representing both public and private constituents, based in the Washington DC metropolitan area of the United States of America. The National Emergency Number Association (NENA) and the Emergency Management and Research Institute (EMRI) signed a MOU on August 14, 2005 jointly strive to promote, support and advance the mission and goals of each and to work together whenever possible and appropriate.

- **Hospitals** - The MOU signed with hospitals, both government and private hospitals state the purpose and need for the partnership clearly. It seeks the acceptance of the hospitals to receive appropriate cases for stabilization or treatment or both, depending on the facilities, skills and equipment the hospital has.

- **American Association of Physicians of Indian Origin (AAPI)** - AAPI is an organization representing physicians and medical students, residents and fellows of Indian origin in the US. AAPI and EMRI’s primary objectives include excellence in pre-hospital care, teaching and applied research in different areas of emergencies and to pursue their aspirations in professional and community affairs.

- **Shock Trauma Centre** - EMRI has signed a MoU with Shock trauma centre to share protocols on Emergency

- **Stanford University USA** - EMRI has signed MoU with Stanford School of Medicine for providing training to Emergency Medical Technicians. EMRI in association with Stanford started two year Post Graduate Programs in Emergency Care where 145 students and 40 trainers are undergoing training.
Singapore Health Services: EMRI has signed MoU with Singapore Health Services for providing Training to Doctors in Emergency Department.

City of Austin in Texas, USA: and one of the best performers in running the 9-1-1 emergency service, became a strategic partner with Emergency Management Research Institute (EMRI). MoU to this effect was signed on 01 March 2008. Under the MoU, the Combined Transportation Emergency & Communication Centre (CTECC) that runs 9-1-1 in Austin and EMRI will share knowledge and processes for better emergency management. EMRI and CoA would also exchange study and research programmes, and work together in other areas of mutual interest.

Government of Andhra Pradesh: EMRI has signed a MoU with the Govt. of Andhra Pradesh. Through this MOU, the state government agreed to recognize EMRI as a nodal agency to provide emergency response across the state, in public private partnership. To establish this further both parties agreed upon administrative, legal and other responsibilities. The police and fire personnel have become an integral part of the success story of EMRI.

(Signing of 3rd MoU on October 5th, 2007 between Government of AP and EMRI. CEO EMRI and Commissioner Family Welfare represented EMRI and Government respectively)
The 24X7 Operations to Make Common Man Safer
EMRI Experience in Andhra Pradesh

EMRI’s greatest and most valued achievement is the number of lives it has saved and the number of emergency calls it has answered successfully. EMRI completed more than two years of operation in Andhra Pradesh and achieved the following (Up till October 2007)

- 108 services are available (502 Ambulances) throughout the State of Andhra Pradesh covering 8 crore population with its services and in 61 towns in 13 districts (79 Ambulances) in Gujarat covering a population of 1.96 crore.
- Saved (23,500 Lives up to October 2007)
- Received 6.5 lakh emergency calls out of 10 Million total calls - On average 3300 emergency dispatches per day
- 95% Calls answered in two rings
- Average time taken from call receipt to reaching hospital-38 minutes
  - Centralized Emergency Response Center for the entire State of Andhra Pradesh in operation since August 15th 2005
  - The ERC is equipped to handle 100,000 calls per day
  - Types of emergencies (Medical: 97.5%, Police: 2.3 %; Fire: 0.2%)
- Types of Medical emergencies: 26% Injury, 20%, Pregnancy - 3%, Suicide / Poisoning - 6%, Cardiac - 5%, Respiratory - 4%, Animal Bite 2 %

### Medical Emergencies

<table>
<thead>
<tr>
<th>GROUP TYPE</th>
<th>EMERGENCY TYPE</th>
<th>CUMULATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1st April 2007 to Till date</td>
</tr>
<tr>
<td>Medical</td>
<td>Injury</td>
<td>131732</td>
</tr>
<tr>
<td></td>
<td>Pregnancy Related</td>
<td>98805</td>
</tr>
<tr>
<td></td>
<td>Respiratory</td>
<td>19278</td>
</tr>
<tr>
<td></td>
<td>Suicide</td>
<td>13877</td>
</tr>
<tr>
<td></td>
<td>Cardiac</td>
<td>23033</td>
</tr>
<tr>
<td></td>
<td>Diabetes</td>
<td>3668</td>
</tr>
<tr>
<td></td>
<td>Acute Abdomen</td>
<td>27279</td>
</tr>
<tr>
<td></td>
<td>Animal Bite</td>
<td>12127</td>
</tr>
<tr>
<td></td>
<td>Poisoning/Drug overdose</td>
<td>16510</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>152039</td>
</tr>
<tr>
<td></td>
<td>TOTAL</td>
<td>498348</td>
</tr>
</tbody>
</table>


**Medical Emergencies**

- **Acute abdomen 8%**
  - Survived 98%
  - Expired 2%

- **Diabetes 1%**
  - Survived 89%
  - Expired 11%

- **Animal bites 2%**
  - Snake 42%
  - Scorpion 22%
  - Insects 12%
  - Dog 19%
  - Wild animals 3%
  - Others 2%
  - Survived 97%
  - Expired 3%

- **Neonatal 0.2%**
  - Survived 79%
  - Expired 21%

- **Pediatric 0.1%**
  - Survived 94%
  - Expired 6%

### Age Wise

<table>
<thead>
<tr>
<th>Age Range</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 yrs</td>
<td>1</td>
</tr>
<tr>
<td>10-15 yrs</td>
<td>1</td>
</tr>
<tr>
<td>15-20 yrs</td>
<td>1</td>
</tr>
<tr>
<td>20-25 yrs</td>
<td>1</td>
</tr>
<tr>
<td>25-30 yrs</td>
<td>2</td>
</tr>
<tr>
<td>30-35 yrs</td>
<td>3</td>
</tr>
<tr>
<td>35-40 yrs</td>
<td>4</td>
</tr>
<tr>
<td>40-45 yrs</td>
<td>7</td>
</tr>
<tr>
<td>45-50 yrs</td>
<td>10</td>
</tr>
<tr>
<td>50+ yrs</td>
<td>70</td>
</tr>
</tbody>
</table>

Mean Age 56 yrs

### Years Age Wise

<table>
<thead>
<tr>
<th>Age Range</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 yrs</td>
<td>3</td>
</tr>
<tr>
<td>10-15 yrs</td>
<td>3</td>
</tr>
<tr>
<td>15-20 yrs</td>
<td>8</td>
</tr>
<tr>
<td>20-25 yrs</td>
<td>13</td>
</tr>
<tr>
<td>25-30 yrs</td>
<td>16</td>
</tr>
<tr>
<td>30-35 yrs</td>
<td>13</td>
</tr>
<tr>
<td>35-40 yrs</td>
<td>10</td>
</tr>
<tr>
<td>40-45 yrs</td>
<td>8</td>
</tr>
<tr>
<td>45-50 yrs</td>
<td>7</td>
</tr>
<tr>
<td>50+ yrs</td>
<td>19</td>
</tr>
</tbody>
</table>

Mean Age 34 yrs

### Survived and Expired

- **Survived 89%**
- **Expired 11%**

### Emergency Type

- **ARDS/SOB** 70%
- **Convulsions** 6%
- **Dehydration** 6%
- **Febrile Convulsions** 1%
- **Meningitis/Encephalitis** 2%
- **Neonatal tetanus** 6%
- **Unconscious** 6%
- **Others** 3%

### Economic Status

- **ARDS/SOB** 45%
- **Convulsions** 34%
- **Dehydration** 14%
- **Septicemia** 3%
- **Unconscious** 4%

### Gender and Area Wise

- **M : F (%)**
  - Acute abdomen 62 : 38
  - Animal bite 65 : 35
  - Diabetes 59 : 41

- **R : U (%)**
  - Acute abdomen 74 : 26
  - Animal bite 80 : 20
  - Diabetes 56 : 44

### Social status

- **EM type**
  - **BC**
  - **OC**
  - **SC**
  - **ST**
  - Acute abdomen 44% 12% 29% 14%
  - Animal bite 50% 18% 21% 11%
  - Diabetes 39% 33% 21% 7%

### Economic status

#### Emergency Type

<table>
<thead>
<tr>
<th>Pink card(%)</th>
<th>White card(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Abdomen</td>
<td>3 97</td>
</tr>
<tr>
<td>Animal bite</td>
<td>3 97</td>
</tr>
<tr>
<td>Diabetes</td>
<td>24 76</td>
</tr>
</tbody>
</table>

### Occupation

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Animal bite(%)</th>
<th>Acute abdomen(%)</th>
<th>Diabetes(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>daily wage worker</td>
<td>59 51</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>house wife</td>
<td>14 20</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>student</td>
<td>12 12</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>others</td>
<td>6 5</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>self employed</td>
<td>5 4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>employee</td>
<td>1 3</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>unemployed</td>
<td>1 2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>street child</td>
<td>0.5</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>transport worker</td>
<td>0.8 0.5</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>business</td>
<td>0.2 2</td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>
Process of Emergency Management

The Government of India has allotted a **three-digit number – 108** at the request of the Government and made it toll-free across the State for all emergencies. 108 is accessible from fixed lines and mobile phones.

**Call 108**

<table>
<thead>
<tr>
<th>Sense</th>
<th>Reach</th>
<th>Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Communication Officer (CO) collects facts</td>
<td>• Vehicle(s) reaches the site</td>
<td>• EMT provides pre-hospital care while transporting patient/victim to appropriate hospital for stabilization</td>
</tr>
<tr>
<td>• Dispatch Officer (DO) scopes emergency and assigns strategically located vehicle (ambulance/police/fire)</td>
<td>• Ambulances deployed at strategic locations within reach of victims</td>
<td>• Over 2500 medical technicians</td>
</tr>
<tr>
<td>• Response within two rings</td>
<td></td>
<td>• Physicians for Pre arrival Instruction &amp; Medical direction</td>
</tr>
<tr>
<td>• GIS and GPS technology</td>
<td></td>
<td>• MoUs with Hospitals</td>
</tr>
</tbody>
</table>

Emergency Response Centre Physician (ERCP) supports CO, DO, EMT, patient and hospital admission

- **Communication Officer** answers a call and collects the specific information in 30 seconds.
- The **Dispatch Officer** assigns the vehicle - Police, Medical or Fire within 3 minutes (Average Time)
- DO Supervisor and CO Supervisor monitors the process
- The **Emergency Medical Technician** contacts the victim and gives assurance specifying the approximate time of reaching.
- Ambulance Supervisor monitors the field activity
- The **Emergency Response Center Physician** guides the Victim before the ambulance reaches and the EMT after reaching the Victim (Pre Arrival Instruction and Medical direction till the victim is moved to the nearest hospital)
- Pre Hospital Care in the ambulance en route to the Hospital
• Patient Care Record with the details of the Pre Hospital care given in the ambulance is handed over to the receiving hospital and to EMRI head office later
• A follow up is done after 48 hours to assess the impact of the care given by 108 to every patient attended
• Periodic Audits of the Ambulances and Equipment
• Refresher Training to enhance the skill sets of the EMTs, Pilots, COs and DOs
• Periodic reports to the Partners in Government, Health, Police and Fire
• Partnership with National and International Organizations for Continuous Improvement
• Technology Partnership and Continuous support by Satyam Computer Services Limited
• Education to Students and Community to Call 108 for all Emergencies
• Awareness Programs to improve the recall level of 108
• Analysis of the data on Emergencies attended to enable prevention and improved Emergency Care
• Publish Indian Emergency Journal covering the Spectrum of Emergency Situation Globally
• Customer Meets to assess and improve the quality of 108 services
• Recognize Heroes who contributed to the Society in Emergencies - Constituted Awards like SHE (Selfless Heroism in Emergency) and EENA (EMRI Emergency Nurses Award) where by 13 SHE and 21 EENA awards were given.
• NENA (National Emergency Number Association) Presidential Award received on June 13th 2007
• Microsoft Award for using the best Technology to Sense the Emergencies
• TERI award for best CSR initiatives in the Country
• FICCI award for the best CSR initiative

EMRI EXPERIENCE in Gujarat:

Activities initiated after receiving letter of Intent from Government of Gujarat (GoG) on 27th June 2007.

• Acceptance of EMRI Proposal and release of Pre Operational Costs and handing over the Temporary building.
• Site preparation of Temporary building of approx 12,000 sft in Ground + 2 floors (Civil works, interiors, Data & Voice cabling, Electrical cabling, Electricity including UPS etc), Establishing ERC center, Server room etc.
• Procurement of IT Hardware & Software.
• Installation, testing/integrated testing of software including application software, Data Creation and validation
• Data collection and Validation and handing over to Software team (including Segmentation data and GIS Maps)
• Support provided to GoG to obtain 108 toll free number, and make it accessible through landline/Mobile and connectivity from all Telecom Service providers including BSNL.
• Recruitment of Communication Officers and Dispatch Officers.
• Training of Communication Officers and Dispatch Officers
• Recruitment of Support staff
• Recruitment of EMTs and Pilots
• Training of EMTs and Pilots
• Recruitment of Emergency Response Centre Physicians and Faculty for Emergency Medical Learning Centre.
• Procurement of Ambulances (Bare Vehicle) in Phase IA 25 and 50 in Phase I B
• Fabrication of Ambulances including exterior design of 37 ambulances.
• Procurement and Delivery of Medical Equipment
• Equip the ambulances with medical equipment/medicines etc
• Promotion and Awareness programs
• Partners Meeting (Doctors, Telecom Service Providers, Hospitals, Police, Fire, Medical...).
• Inauguration in Ahmedabad on 29th August 2007 by Chief Minister in the Presence of His Excellency A P J Abdul Kalam former President of India with 15 ambulances covering a population of 55 lakhs in cities of Ahmedabad and Gandhinagar and connecting highways.
• Further Inauguration in Porbandar on 2nd October by Chief Minister with 17 ambulances covering a population of One Crore in 5 Districts of Saurashtra (Porbandar, Rajkot, Surendranagar, Jamnagar and Junagadh)
• Having launched the 108 emergency services with 14 ambulances, in the state capital, today 79 ambulances serve 19.6 million population covering 61 towns and 13 districts. Another 71 ambulances will be added to the existing fleet of ambulances making the total to 150 ambulances by March’08.
• With support from the Government of Gujarat in the last 5 months of its operations there has been a remarkable progress and is marching ahead in pursuit of expanding the service to the entire state of Gujarat in a year’s time.
• Currently operating out of the Civil Sola Hospital facility, the Government of Gujarat has allocated land at Kathwada to develop a state-of-the-art emergency response center.
• So far the Emergency Response Center has received over 5,57,206 calls and handled over 30,113 emergencies having saved 1393 till 31st January, 2008. The average time taken from receiving the call to reaching the scene is 11 minutes. The average time taken from receiving the call to reaching the victim to the hospital is 31.14 minutes. Appreciable rise in Pregnancy cases managed from 18 in October’07 to 42 in November’07 and 205 in December’07 and 745 cases in January,’08. Out of all cases 11% is cases are Pregnancy cases and in the month of February this percentage has grown to 14% with 1284 cases.
FOR ALL THE ABOVE:

- **EMT** is trained for 6 weeks in EMRI and 2 Weeks in the Emergency Room of Hospitals

- **Pilot** is trained on Medical Protocols and Soft Skills apart from Driving to assist in the Emergency Situations

- **Ambulance Supervisor** - There would be one supervisor for 7 ambulances, who does ambulance audits and monitors EMTs and Pilots including duty roster, Hospital relations, Skills development of EMTs and Pilots, Process adherence, PCR forms review.

- **District Coordinator** - One per each district would head operations of the district and take up activities including conducting awareness meetings, Partners Meetings, Volunteerism.

- **Regional Coordinator** - One per each region would have 10 districts coordinator reporting to him would provide Guidance to the District Coordinator.

- **Fleet Supervisor (one or two per district)** - Is responsible for Preventive and Breakdown maintenance of Ambulances, monitors the mileage, trains pilots on good driving habits.

- **Fleet Manager (at State level)** - Monitors Fleet supervisors, is responsible for procurement and training of Pilots is responsible for 98.2% uptime of the fleet of Ambulances

Everyone who works with EMRI is a leader and collaborator in the growth of the organization. It has made remarkable progress in little over 2 years time and marching ahead in pursuit of expanding similar services to the entire country.
**EMRI State Unit**

Each state would in turn have similar structure headed by Chief Operating Officer and further guided by the functional Head at Corporate.

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**EMRI State Unit**

**Organisation Structure**

---

<table>
<thead>
<tr>
<th>Legend</th>
<th>Description</th>
<th>Legend</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AS</td>
<td>Ambulance Supervisor</td>
<td>ERCP</td>
<td>Emergency Response Centre Physician</td>
</tr>
<tr>
<td>CO</td>
<td>Communication Officer</td>
<td>FM</td>
<td>Fleet Manager</td>
</tr>
<tr>
<td>CS</td>
<td>Corporate Services</td>
<td>FS</td>
<td>Field Supervisors</td>
</tr>
<tr>
<td>DC</td>
<td>District Coordinator</td>
<td>PCR</td>
<td>Patient Care Record</td>
</tr>
<tr>
<td>DO</td>
<td>Dispatch Officer</td>
<td>Pilot</td>
<td>Trained Driver</td>
</tr>
<tr>
<td>EMLC</td>
<td>Emergency Medicine Learning Centre</td>
<td>PPP</td>
<td>Public Private Partnership</td>
</tr>
<tr>
<td>EMT</td>
<td>Emergency Medical Technician</td>
<td>RC</td>
<td>Regional Coordinator</td>
</tr>
</tbody>
</table>

---

Legend:
- **AS**: Ambulance Supervisor
- **CO**: Communication Officer
- **CS**: Corporate Services
- **DC**: District Coordinator
- **DO**: Dispatch Officer
- **EMLC**: Emergency Medicine Learning Centre
- **EMT**: Emergency Medical Technician
- **ERCP**: Emergency Response Centre Physician
- **FS**: Field Supervisor
- **FM**: Fleet Manager
- **PCR**: Patient Care Record
- **RC**: Regional Coordinator
- **TP**: Trained Pilot
- **PPP**: Public Private Partnership

---

Description Legend:
- **AMBY**: Ambulance Medical (Pilot)
### Manpower Profile

<table>
<thead>
<tr>
<th>Category</th>
<th>Designation</th>
<th>Nos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head - State EMRI(COO)</td>
<td>Exec. Partner</td>
<td>1</td>
</tr>
<tr>
<td>Head - Sense</td>
<td>Lead/Sr Partner</td>
<td>1</td>
</tr>
<tr>
<td>Head - Reach</td>
<td>Lead/Sr Partner</td>
<td>1</td>
</tr>
<tr>
<td>Head - Care</td>
<td>Lead/Sr Partner</td>
<td>1</td>
</tr>
<tr>
<td>Head- Support Functions</td>
<td>Lead/Sr Partner</td>
<td>10</td>
</tr>
<tr>
<td>CO Supervisor</td>
<td>Partner</td>
<td>1 for 15 COs</td>
</tr>
<tr>
<td>DO Supervisor</td>
<td>Partner</td>
<td>1 for 15 Dos</td>
</tr>
<tr>
<td>Communication Officer (CO)</td>
<td>Associate</td>
<td>1 for up to 500 calls</td>
</tr>
<tr>
<td>Dispatch Officer (DO)</td>
<td>Associate</td>
<td>1 for up to 90 dispatches</td>
</tr>
<tr>
<td>Regional Coordinator (RC)</td>
<td>Associate Partner</td>
<td>1 for 7-10 districts</td>
</tr>
<tr>
<td>District Coordinator (DC)</td>
<td>Assistant Partner</td>
<td>1 for each district</td>
</tr>
<tr>
<td>Ambulance Supervisor (AS)</td>
<td>Associate Partner</td>
<td>1 for 7-10 Ambulances</td>
</tr>
<tr>
<td>Fleet Manager (FM)</td>
<td>Sr Partner</td>
<td>1</td>
</tr>
<tr>
<td>Fleet Supervisor (FS)</td>
<td>Associate Partner</td>
<td>1 for each district</td>
</tr>
<tr>
<td>Emergency Centre Response Physician (ERCP)</td>
<td>Assistant partner</td>
<td>1 for 25-50 emergencies</td>
</tr>
<tr>
<td>Patient Care Record (PCR)</td>
<td>Assistant Partner</td>
<td>4 - 5</td>
</tr>
<tr>
<td>Head - EMLC</td>
<td>Lead Partner</td>
<td>1</td>
</tr>
</tbody>
</table>

### Various functions in EMRI:

**SENSE (COMMUNICATION AND DISPATCH)**

The Objective of the sense team is to enable an appropriate response to the caller both individually and collectively on behalf of the Emergency Response Centre (ERC). A very important pattern of teamwork has been established to serve the caller. Empathy is the key requirement of the call taker while eliciting information.
The guidelines of EMRI – ERC in providing assistance to the public in an emergency situation (medical, police, fire) are as follows -

- Relaying information
- Taking the right decisions and setting action plan in motion
- Procedure to render assistance for emergency calls

The personnel at the call taking are called communication officers (CO) who are trained to deal with each type of call, in doing so he/she is responsible for eliciting all necessary information for servicing the call.

The dispatch officer (DO) receives the information from the communication officers and is responsible for identifying the location landmarks informing the ambulance team of Emergency Medical Technician (EMT) and the Pilot of the case and quickly dispatching the nearest ambulance to the scene site. Police/Fire vehicle are dispatched in case of Police/Fire Emergency.

**CARE (PRE HOSPITAL CARE)**

Care is responsible for the pre hospital care. The process starts with the call of the DO to the EMT. The EMT, along with the pilot reaches the spot of Emergency, picks up the patient gives medical aid to the victim in ambulance, on the way to the hospital. The Emergency Response Centre Physicians (ERCP) at the ERC plays the life saving role. The team of ERCP collects the vital status from the EMTs and would give Medical direction to the EMT in providing the pre hospital care to the victim including pre-arrival instructions.

**Hospital Relationship** - Team works on partnering with hospitals and gets commitment from hospitals to accept the patient immediately on arrival, irrespective of financial status or medico legal issues. Information about the hospital facilities are collected and reviewed at periodic intervals. The data is collected in HIS database and is retrieved using advanced search criteria.

**Alliance and Partnerships** - The team works on Alliances with various organizations world wide. This helps in sharing knowledge, adopting best practices from other organizations. Partnering with Technology companies, Telecom providers, Training Institutes in Emergency Medicine and various Associations world wide can help EMRI in improving Emergency Response Centre, adopting better technologies, developing protocols in pre hospital care.

**Corporate Services** - The Corporate Services team at EMRI provides Infrastructure facilities for 108 operations including

1) Physical Infrastructure and Ambulances
2) Procurement activities relating to EMRI
iii) Hospitality and allied services (Including Travel, Hotel booking, transport to all employees and handling visitors and events).

**Finance and Legal** - The Finance team plays a vital role in organizations, the team takes care of following in EMRI

- Accounting
- Treasury
- Budgets and MIS
- Fund Development
- Risk Management
- Oracle Financials

**Human Resources** - The people in EMRI are differentiators, the team in Human resource ensure that people joining EMRI are Passionate, have commitment, Ability, are Resourceful and Empathetic. Various activities undertaken are by HR are

- Recruitment
- Induction
- Associate Relations
- Performance Management
- Leadership Development
- HR Policies
- Recognition & Rewards

**Marketing and Communications** -
The marketing team would be responsible for the following:

- Brand Building
- Responsible for growth and brand positioning
- Increase visibility and mind share
- Launches
- Event Management
- Defining the information distribution channels
- Planning, coordinating and monitoring of advertising and promotion of the brand
- Managing all external media (Print, wire electronic)
- Market Research
- Public Relations
- Website
- Cost control & savings by devising new formats & economies

**Quality Management** - The EMRI quality team closely works with all businesses and helps them in
• Establish, Document, Implement, and Maintain process.
• Develop, review, update, and maintain Quality Management System (QMS).
• Driving the iSTRIVE TM Six Sigma culture in the organization.
• Define and perform various audits such as.
• Design and Develop a Testing & Validation team
• Training all associates on Quality, QMS, & Six Sigma.

Quality audits such as Communication Officer Audit, Dispatch Officer Audit, Ambulance Audit, Go-Live Audits for (CO, DO, & Rural Life Support (RLS) Ambulance) & Internal Process Audits for all FLCBs are conducted at regular intervals for compliance check.

Emergency Medical Learning Centre

In any area of endeavor education and training is indispensable to success of the final offering. Training Team at EMRI aims at Conducting education and training for medical and allied health professionals in Emergency Medicine and Care.

Following programs are conducted by EMLC

- Post Graduate Program in Emergency Care - A two year full time residential program is designed in partnership with Stanford School of Medicine.
- Foundation training program for EMTs and Pilots
- In service training program
- First Responder Training program
- Skill development programs for General Practitioners and House Surgeons
- Orientation training Camps for Doctors and Nurses
- Virtual learning events
- Essential EM practices (Basic / Advanced)

Technology

Technology is the core to EMRI’s Success. Satyam Computers is the Technology partner for process development and automation. A team of Software Engineers is dedicated to develop, enhance and support the technology system which is the backbone of Emergency Response System.

Analysis and Research

The objectives of Analytics and Research team are

- To analyze, interpret and estimate the trends of technology, education systems, training, standards on the speed and quality of patient care in emergencies.
To help in policy making (Level of Health Care Institutions, Integration of hospital facilities, Public Education, Public Health)
To integrate developments, impacting policies and resource deployment
To transfer knowledge (Publications, Conference)
To study patient impact (Significant reduction in morbidity and significant reduction in Mortality, treatment at hospital and cost effective health care.

Analysis and Research – A P EMR

Availed Dispatches

**OCCUPATION**
- Business 3%
- Farmer 28%
- Housewife 40%
- Retired 1%
- Student 11%
- Employed 17%

**SOCIAL STATUS**

<table>
<thead>
<tr>
<th>Occupation</th>
<th>% of Victims</th>
<th>Population Proj '07</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC</td>
<td>17%</td>
<td>11%</td>
</tr>
<tr>
<td>BC</td>
<td>46%</td>
<td>66%</td>
</tr>
<tr>
<td>SC</td>
<td>25%</td>
<td>16%</td>
</tr>
<tr>
<td>ST</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>815.1 lacs</td>
</tr>
</tbody>
</table>

**WEEK DAY PATTERN**
- SUN: 13.1%
- MON: 13.3%
- TUE: 12.8%
- WED: 13.1%
- THU: 13.0%
- FRI: 12.4%
- SAT: 12.7%

**RTA CASES**
- HIGH 4 TO 11PM
- PEAK 7 TO 8PM

**AVAILED**
- Patient survived: 96%
- Patient died: 4%
- Male: 53%
- Female: 47%

**Amb arrival Time**
- < 15 MIN: 67%
- 16-20MIN: 12%
- 21-25MIN: 9%
- 26-30MIN: 6%
- 30+MIN: 7%

**Rural** 70%
**Urban** 30%

Reference Period: Feb 2008