

IV. Recommendation: A “Right to Emergency Medical Care Act” for India

In July 2015, the former President of India, Dr APJ Abdul Kalam suffered a massive cardiac arrest while delivering a lecture at the Indian Institute of Management, Shillong. Rushed to Bethany Hospital, Dr Kalam, who was the Head of State from 2002 to 2007, succumbed to the heart attack. Hospital records revealed that the former President arrived in a “critical condition” where he was “almost dead.”³⁶⁰

More recently in June 2022, noted musician KK, too, succumbed to a massive cardiac arrest. The 53-year-old suffered a heart attack after performing a live show at Nazrul Manch, Kolkata. Various medical practitioners suggested that had immediate Cardiopulmonary Resuscitation (CPR) been provided to the singer—even by a lay person—and transferred to a cardiac care centre, this death could have been avoided.³⁶¹

In the years since these unfortunate events, more than one million patients across India have died as a result of medical emergencies. According to data from the National Crime Records Bureau of India, over a five year span between 2017 and 2021, 1,34,144 people died due to cardiac arrest alone³⁶².

³⁶⁰ “Former President APJ Abdul Kalam Passes Away In Shillong Following Massive Heart Attack.” *Businessworld*, July 27, 2015. <https://www.businessworld.in/article/Former-President-APJ-Abdul-Kalam-Passes-Away-In-Shillong-Following-Massive-Heart-Attack/27-07-2015-84108/>

³⁶¹ “Singer KK Could Have Been Saved If Timely CPR Was Given: Doctor Explains What Went Wrong.” *The Health Site*, June 6, 2022. <https://www.thehealthsite.com/news/%20singer-kk-could-have-been-saved-if-timely-cpr-was-given-doctor-explains-what-went-%20wrong-885079/>

³⁶² “Accidental Deaths and Suicides in India, 2021.” National Crime Records Bureau, Ministry of Home Affairs, Government of India, August, 2022. https://ncrb.gov.in/sites/default/files/ADSI-2021/ADSI_2021_FULL_REPORT.pdf

On the other end of the emergency medical care spectrum, trauma remains the number one killer of patients aged 1-44 in India. Road crashes form one of the biggest components of traumatic deaths. Over the five year span from 2017 to 2021, 7,36,129 people died as a result of motor vehicle crashes translating into nearly 403 people dying of road crashes everyday³⁶³. This is analogous to nearly 3 Boeing 737 aeroplanes crashing every day³⁶⁴ and represents a tremendous burden on the filial and socioeconomic fabric of the country. The astonishing gaps in emergency medical care in India, particularly trauma care, have a significant role to play in the preventable loss of life. Despite the Supreme Court of India in 1989 observing in the *Parmanand Katara v. Union of India AIR 1989 SC 2039* that when “accidents” occur and victims are taken to hospitals or to a medical practitioner, they cannot be refused emergency medical treatment on the grounds of their ability to pay for the treatment. This was further reiterated by the Supreme Court in the *Paschim Banga Khet Mazdoor Samithi v. State of West Bengal, 1996 (4) SCC 37*.³⁶⁵ Although Article 21 of the Indian Constitution guarantees the Right to Life as a fundamental right, there is no explicit mention of a Right to emergency medical care.

Even though 30 years have passed since the Supreme Court identified a gap in the emergency medical care system, to date, this problem has not been fully addressed. It is still a well-known fact that trauma victims are often denied hospitalisation during their time of need. There are a multitude of reasons for this finding:

1. Lack of appropriate medical facilities for performing trauma resuscitation
2. Potential inability of a patient to pay, necessitating their need to go to a government hospital leading to potential delays in treatment of care and avoidable death
3. The higher the severity of trauma injury, the higher the chances of hospital denial

As per the 201st Report of the Law Commission of India, 50% of those killed in road crashes could have been saved had they received timely emergency medical care.

363 “Road Accidents in India, 2021.” Ministry of Road Transport and Highways, December 2022. https://morth.nic.in/sites/default/files/RA_2021_Compressed.pdf

364 “Technical Specs”. Boeing. Accessed January 24, 2023. <https://www.boeing.com/commercial/737ng/>

365 *Parmanand Katara v Union of India and Ors.* 1989 SCR (3) 997. <https://main.sci.gov.in/jonew/judis/7839.pdf>

A 2021 study by the All India Institute of Medical Sciences, New Delhi, found that while 91% of hospitals had ambulances, less than 35% of them had trained medical staff and paramedics to actually provide emergency medical care in life-and-death situations³⁶⁶. For any patient battling an emergency situation, time is of the essence. The “Golden Hour” of trauma care has been universally accepted as the most critical time in setting the trajectory of an emergency medical/trauma patient. Unfortunately, Indian citizens die every day, many whose deaths were preventable, due to a lack of a structured emergency response system at the pre-hospital and hospital levels. Several key factors can be attributed to these preventable deaths across India, including:

1. Lack of robust bystander training to activate the critical injury/illness chain of survival (see figure)
2. Lack of protections for those offering assistance to injured/critically ill patients, including a lack of a grievance redressal mechanism under the Good Samaritan Law
3. Lack of one designated universal access number for medical emergencies instead of multiple, differing numbers depending on the location
4. Lack of properly-equipped and properly-staffed emergency response vehicles depending on local geography/terrain
5. Lack of defined national standards for Emergency Medical Technicians (EMTs) and paramedics
6. Lack of designated/verified Emergency/Trauma Hospitals based on capabilities and based on local geography constraints
7. Lack of systems and authorised agencies to enable timely prehospital notifications, and transfer of patients to higher (or lower) levels of care based on severity/level of trauma/illness and based on pre-established protocols

³⁶⁶ “Emergency and Injury Care at District Hospitals in India, A Report of Current Status on Country Level Assessment.” All India Institute of Medical Sciences, New Delhi, and NITI Aayog, 2021. https://www.niti.gov.in/sites/default/files/2021-12/AllIMS_STUDY_2_0.pdf

8. Lack of a defined rehabilitation infrastructure to assist patients in returning to a healthy and productive lifestyle

The lack of these issues is further exacerbated by the lack of a lead agency that could serve as a governing body for how to address each of these points above as well as practice management guidelines. Such an agency may be created through the right to emergency medical care Act to act as a custodian to establish systems and protocols. Had the former President or the singer, KK, received CPR on site initiated by bystanders, followed by professional paramedics applying the lifesaving principles of Advanced Cardiac Life Support in a specialised ambulance with adequate resuscitation equipment while travelling to the receiving hospital that had been notified of their pending arrival and then promptly transferred their care to a trained emergency medical team, they may well be alive today.

Call to Action: The RIGHT to emergency medical care Act, with a special focus on trauma care

Pursuant to the fundamental right to preserve life established by Article 21 coupled with the significant impact of millions of lives lost due to preventable deaths in India from the data and cases described above, it is absolutely essential that a right to emergency medical care Act be established, with a particular focus on trauma care.

Such a right can be enshrined by way of an amendment to the Indian Constitution as in the case of the Right to Education Act, and called out along with essential components of the emergency medical care system, broadly defined as key components of the chain of survival below.

The right to emergency medical care Act may address components of the chain-of-survival at the Union and State levels.

At the Union-level, the following components may be addressed,



1. Bystander Care

Bystanders are often the first people who are witnesses to an emergency situation and with the maximum amount of time to assist the person requiring help. Therefore, within the Right to Bystander Care, three fundamental aspects need to be addressed. These include:



a. *Good Samaritan Law (GSL) for all medical emergencies*

Currently, the law relating to the protection of Good Samaritans is covered under section 134A of India's Motor Vehicles (Amendment) Act, 2019. In addition to incorporating a strong grievance redressal mechanism to give teeth to the GSL, the right to emergency care Act may expand the scope of GSL to all medical emergencies and trauma cases, and not just road crash trauma for it to enable lay rescuers to save more lives.



b. *Citizen training programs*

Bystanders are most often the first persons to come in contact with those that require help in an emergency situation. Given the large population and limited Emergency Medical Services, there is an urgent need for community capacity building. Training programs with a standardised curriculum and certifications need to be developed and ratified to train citizens in large numbers in the basic skills required for temporarily managing emergency medical situations. This aspect of the proposed Act may provide for rule-making by States in this direction.



2. Pre-hospital Infrastructure



a. One Dedicated Universal Emergency Number

A universal, easy-to-remember access number that would be available nationwide is absolutely fundamental to ensuring timely access to emergency medical care. While the Ministry of Home Affairs, under its Emergency Response Support System (ERSS) project, has proposed 112 as the single emergency response number for emergency assistance from Police, Fire and Rescue, Health and other services, there continue to exist multiple numbers to access emergency assistance. These include 108, 102, 1073, 1033, etc. Multiple numbers lead to confusion amongst the public as to which number to call, inevitably leading to a delay in activating the chain-of-survival.

It is therefore recommended that there should be nationwide availability of 112 as the single emergency phone number with subsequent triage by 112 operators for fire, police, medical emergency, disaster, etc. Emergency calls for help to 112 must automatically be accompanied by location-identifying information.



b. Emergency Response Vehicles (ERVs)

While the Automotive Industry Standard 125³⁶⁷ does provide guidance on ambulance design there is great variability in states across the country. The presence of nationally-standardised ERVs to rapidly transport injured or critically-ill patients to a receiving hospital are crucial to moving the patient through the chain of survival. These ERVs should be chosen by local agencies based on geography and terrain and Automotive

³⁶⁷ "AIS 125-Constructional and Functional Requirements for Road Ambulances (National Ambulance Code)" Ministry of Road Transport and Highways, Government of India, June 2013. http://www.nisc.gov.in/PDF/AIS_125.pdf

Industry Standard 125 may include any of the following: bicycle ambulances, motorised two-wheeler ambulances, standard van-type ambulances and air-ambulances.

It is imperative that these ERVs are equipped to meet one national standard, such as highlighted in Automotive Industry Standard 125, including proper lights and sirens, and proper equipment allowing the ambulance to be designated as either a Basic Life Support unit (BLS) or an Advanced Cardiac Life Support unit (ACLS). These ERVs need to be inspected and maintained on a regular schedule by designated state or local agencies.



c. Dedicated national pre-hospital emergency personnel training standards

After the universal access number has been dialled and the ERV arrives on the scene to meet the critically-ill or injured patient, care is assumed by a certified emergency medical professional. To ensure that patients receive the best possible medical assistance at the scene of injury and while in transit to the hospital, the presence of well-trained and certified emergency medical professionals is an absolute must. A select agency needs to establish a national standard curriculum and definitions for the designations of:

- Emergency Medical Responder (EMR)
- Emergency Medical Technician (EMT)
- Advanced Emergency Medical Technicians (AEMT)
- Paramedic³⁶⁸

For this to be possible on a pan-India basis, rigorous periodic training needs to be provided. To ensure holistic training, initial certifications and maintenance of certification will also require standardisation.

³⁶⁸ "The 3 Levels of EMT Certification:A Guide to the Various Levels of EMT Certification, Including Education, Training, and Testing Requirements ." United EMT. Accessed January 24, 2023. <https://www.unitekemt.com/blog/the-difference-between-emt-certification-levels/>



d. Communication mechanism

A robust communication mechanism is the backbone of emergency medical care. The emergency calls made to seek help trigger the chain of activities required to save the life of a patient. This includes the deployment of ERVs that help transport patients to the nearest appropriate medical facility. For this to happen in a timely and efficient manner, a robust communication mechanism is required which is capable of connecting the ERV to the calling centre as well as the various hospitals that are a part of the network and are receiving the patients.

An integrated EMS will allow for:

- Seamless interconnectivity between a centralised managed and/or governed by a central state/city/local agency to identify a sick/injured patient and under the guidance of medical providers, determine the ideal patient destination (closest medical facility vs closest trauma centre).
- Pre-hospital notification systems that will enable receiving hospitals and their teams time to prepare in advance of patient arrival allowing for maximal intervention, especially in life-threatening emergencies.



3. Hospital Infrastructure



a. Trauma Center Designation and Verification

A Statewide integrated or locally integrated EMS should have designated/verified Emergency/Trauma Hospitals based on location (City/Town/District/Mandal level) as

well as on capabilities. The different levels (i.e. Level I, II, III, IV or V) refer to the kinds of resources available in a trauma centre and the number of patients admitted yearly (see below). An integrated EMS will have several of these levels of trauma centres based on population requirements.

Level I Trauma Centers are a comprehensive regional resource, including tertiary care facilities central to the trauma system. A Level I Trauma Center is capable of providing total care for every aspect of injury – from prevention through rehabilitation. Its key elements include:

- 24-hour in-house coverage by general surgeons, and prompt availability of care in specialties such as orthopaedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, internal medicine, plastic surgery, oral and maxillofacial, paediatric, and critical care.
- Referral resources for communities in nearby regions.
- Provides leadership in the prevention, and public education to surrounding communities.
- Provides continuing education for the trauma team members.
- Incorporates a comprehensive quality assessment program.
- Operates an organised teaching and research effort to help direct new innovations in trauma care.
- Program for substance abuse screening and patient intervention.
- Meets minimum requirement for annual volume of severely injured patients.

Level II Trauma Centers are able to initiate definitive care for all injured patients. Key elements include:

- 24-hour immediate coverage by general surgeons, as well as coverage by the specialties of orthopaedic surgery, neurosurgery, anesthesiology, emergency medicine, radiology, and critical care.
- Tertiary care needs such as cardiac surgery, hemodialysis, and microvascular surgery may be referred to a Level I Trauma Center.

- Provides trauma prevention and continuing education programs for staff.
- Incorporates a comprehensive quality assessment program.

Level III Trauma Centers have demonstrated an ability to provide prompt assessment, resuscitation, surgery, intensive care, and stabilisation of injured patients and emergency operations. Key elements include:

- 24-hour immediate coverage by emergency medicine physicians and the prompt availability of general surgeons and anesthesiologists.
- Incorporates a comprehensive quality assessment program.
- Has developed transfer agreements for patients requiring more comprehensive care at a Level I or Level II Trauma Center.
- Provides back-up care for rural and community hospitals.
- Offers continued education of the nursing and allied health personnel or the trauma team.
- Involved with prevention efforts and must have an active outreach program for its referring communities.

Level IV Trauma Centers have demonstrated an ability to provide Advanced Trauma Life Support (ATLS) prior to the transfer of patients to a higher level trauma centre. They provide evaluation, stabilisation, and diagnostic capabilities for injured patients. Key elements include:

- Basic emergency department facilities to implement ATLS protocols and 24-hour laboratory coverage. Available trauma nurse(s) and physicians available upon patient arrival.
- May provide surgery and critical-care services, if available.
- Has developed transfer agreements for patients requiring more comprehensive care at a Level I or Level II Trauma Center.
- Incorporates a comprehensive quality assessment program.
- Involved with prevention efforts and must have an active outreach program for its referring communities.

Level V Trauma Centers provide initial evaluation, stabilisation, and diagnostic capabilities and prepare patients for transfer to higher levels of care. Key elements include:

- Basic emergency department facilities to implement ATLS protocols.
- Trauma nurse(s) and physicians available upon patient arrival.
- After-hours activation protocols if the facility is not open 24 hours a day.
- May provide surgery and critical-care services, if available.
- Has developed transfer agreements for patients requiring more comprehensive care at Level I through III Trauma Centers.



b. Interconnectivity

Pre-established transfer protocols based on triage of the critically ill/injured patient is especially important for time-sensitive diseases such as severe trauma/stroke/MI/ Cardio-pulmonary arrest. These transfer protocols will ensure that the right patient is brought to the right receiving hospital at the right time while also limiting the burden on lower-level facilities that may not have the resources to provide care for an injured or critically ill patient beyond initial stabilisation.



c. Refusals and transfers

It has oftentimes been witnessed that hospitals turn back patients, refusing to admit them. With families running from one hospital to another to ensure admittance for subsequent treatment, precious time is lost, at times proving to be fatal. This aspect of the law may prohibit such refusals by hospitals. Hospitals would be forbidden to turn back a patient without providing them with even basic care. The law should also establish stiff penalties for hospitals in violation of this provision. In order to ensure the seamless transfer of patients between hospitals, inter-hospital transfer agreements may be provisioned for as part of the law and the subordinate rules under it.



d. Training of Emergency Medical Care physicians

Healthcare providers taking care of injured or critically ill patients must be properly credentialed. Regular, rigorous, and specialised training is required for medical health professionals such as paramedics, emergency medical technicians, and others, as per the specific role they play within the entire emergency medical care system. This aspect of the law may mandate the different types of training for emergency medical physicians, trauma specialists, EMTs (classifications as noted in Section 2c above), etc. certifications. Initial certification as a prerequisite to obtaining a position as well as ongoing maintenance of certification (number of credits/mechanisms to be determined by the lead agency) are key elements of ensuring emergency medical providers in both prehospital and post-hospital phases are competent and up to date with their fund of knowledge and skills.



e. Rapid in-hospital triage

A triage system includes a basic structure in which all incoming patients are categorised into groups using a standard urgency rating scale or structure. This triaging helps rapidly identify patients who have suffered major trauma. Such classification through triaging helps determine treatment location and type on the basis of factors including the type of blunt force, type of injury, and signs and symptoms of the injury. Ensuring a timely triage of patients is extremely pertinent to making the most of the time following a health emergency to transport them to the exact facility equipped to assist them.



f. Care Pathways and Practice Management Guidelines (CP/PMGs)

Each designated receiving hospital should develop CP/PMGs to protocolize care of injured or critically ill patients in a standard fashion and based on best practices and current evidence. Examples of such CP/PMGs include Trauma Team Activation,

Trauma Transfers, when to place the Trauma Center on Bypass, Initial Assessment, and Resuscitation, How to order Blood, Management of specific injuries, etc. These CP/PMGs should be periodically updated by the hospital medical team to ensure they are current and up to date.



4. Rehabilitation of emergency and trauma patients

Trauma patients may take weeks, months, or even years to completely recover from the physical, emotional, and psychological impact of being a part of such a life-altering event. It is then paramount that they are provided with the required help and assistance. This aspect of the law may seek to provide access to rehabilitative care as a right to all patients requiring rehabilitation in order to optimise their ability to return to a healthy and productive lifestyle.



5. Funding mechanisms

This aspect of the law may enable the Union and State governments to develop schemes and policies to fund the right to emergency medical care. Among other essential responsibilities that this mechanism will fulfil, such a budget should also be utilised for training healthcare providers to impart emergency healthcare services in various capacities. Within the ambit of such training, drivers, police personnel and common citizens must also be included.

At the state level, the following component may be addressed,

Development of an integrated Emergency Medical System (EMS) at the State Level

The right to emergency medical care Act, with a particular focus on trauma care, may provide for States to develop a statewide emergency medical system with fourteen unique attributes:

1. Integration of Health Services
2. Performing EMS Research
3. Developing Statewide Legislation and Regulation
4. Developing and maintaining EMS Finance to determine the costs and benefits of EMS to the community as well as exploring opportunities for funding
5. Developing Human Resources
6. Medical Direction to guide best practices
7. Education Systems for the training of professionals (both prehospital and hospital)
8. Public Education: bystander training as described above
9. Injury Prevention and Awareness
10. Public Access
11. Robust Communication Systems to ensure timely decision-making
12. Standardisation of Clinical Care provided
13. Information Systems
14. Robust Evaluation and Transparent Process Improvement Processes