

EMERGENCY MEDICAL SERVICES(HEMS) UNDER CORPORATE SOCIAL RESPONSIBILITY(CSR)

Introduction

1. Helicopter Emergency Medical Services (HEMS) is not a commercial business proposal but service for the mortally injured to reduce mortality and permanent damage to health. In the early days, you were lucky if you could reach the hospital on time. Today, the hospital in the form of Helicopters specifically designed for the aero medical needs of the patient along with Life support equipment and doctor qualified in EMS /Paramedic and medicines comes to you.

What Is HEMS?

2.(a) It is a Mobile Life Support System on Wings that can reach the remotest of places. Effective during natural calamities to transport the neediest patient to the hospital within the "Golden Hour".

(b) It caters to the medical needs of people affected over a larger area.

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How will HEMS help?

3. By providing HEMS, we can improve Patient Care, reduce Health Care costs, extend Geographical reach of Specialized Medical Centers and increase patient survival and recovery.

4. For this to happen in India, a comprehensive paper outlining actions necessary to launch a low-cost helicopter emergency services in State capitals of the Country has been attempted. Initially, these services could be operated from the airports co-located in State Capitals.

Why do you need HEMS in India?

5. Air medical transportation has become a key component of health care in many countries throughout the world. It's important to India as travelling time from many of our population centres to hospital may be well in excess of golden hour by surface vehicles. Many remote

communities are deprived of the required level of health service. In the year 2000, around 40 per cent of the 825,000 villages in India lacked all-weather access roads. This constrained access to essential services including health services. **It is therefore necessary to introduce HEMS covering people living in remote, mountainous and population centers where appropriate treatment is not available owing to lack of specialty hospitals.**

6. During natural calamities, HEMS is needed to transport the neediest patient to the hospital within the "Golden Hour".

7. It is also needed to be introduced for Road Accident victims especially in National Highways in reducing the high morbidity and mortality rates.

8. It can be used to bring lifesaving drugs in times of national calamity like flood/earth quake to the affected areas.

9. Transport organs harvested from cadavers to the recipients in a different hospital.

10. Transport surgeons/specialists to mass/individual casualty incident site.

Scope & Methodology

11. The proposal is extended to the critical medical emergencies inclusive of Aam Admi. The decision to call for HEMS will lie with the local hospital or Police station nearest to the site of the accident and the decision to fly also will be made on the merits of the case. The doctor in charge at the medical response trauma center will operate in association with the HEMS at the Airport located in State capital. HEMS can decide whether to fly or not after consulting the pilot about the weather, suitability of the landing site at the location of the accident etc.

12. HEMS Foundation (Established in November 2010 in Chennai) is willing to extend its services to any State Govt in India to operate a model Helicopter Emergency Medical Services in association with land services and hospitals as a free service for the mortally ill/ injured in an area covering about 100 km around the State Capital as hub during daylight hours as and when requisitioned by the local hospital or Police.

Priority Usage for victims in Road Accidents Recommended

13. It is estimated that in 2015, death toll was around 154,600 persons and around 309,000 with serious injuries in road accidents. It is apparent from these figures that morbidity and mortality from road accidents is very high. Road accidents victims are predominantly male, within the age group of 5 –44 years (>70%), the most productive section of our society. 'In the year 2000, the Planning Commission had assessed the social cost at Rs. 55,000 Crore due to road accidents in the country. **In view of the high morbidity and mortality rate of victims in road accidents, HEMS may be introduced first in this sector.**

Cost of Operation

14. The normal operations of HEMS involve a charter cost, expenditure related to Critical care specialist & paramedic fees, hiring Medical Equipment Accessories / Test Kits/ Medicines & Supplies / Communication as per actual requirements and for imparting regular training. Present day charter costs for a single engine machine is about Rs.65000 to Rs 75000/- per hour (AS350B3). For a twin engine such as Dhruv, it may cost around rupees 2.5lac. Critical care specialist Fee is Rs 6000 and for paramedic Rs.3000 per evacuation involving 6 hours and fee for Flying Medical Equipment / Accessories / Test Kits/ Medicines & Supplies / Communication as per actual. The actual cost of evacuating a mortally injured accident victim up to 120km away from the State Capital by a Single Engine Helicopter may cost around rupees one lac. Many corporates are likely to support the venture as a corporate social responsibility(CSR).

Infrastructure & Organization

15. The proposed HEMS would be able to cover a range of 100 km radius around the Airport in state capital. Besides the infrastructural support, most of the Airports in state capital has the necessary facilities including hanger, parking bay, maintenance facilities and response center for air and medical crew. HEMS response center will also need to co-ordinate with land-based agencies namely National Highways, Indian Railways, EMRI, District Police, District Fire services and Forest Department and surface ambulance agencies.

Support Services

16.It is proposed that HEMS Foundation will operate HEMS response center as a nodal agency in association with government agencies to give the best evacuation services to the real emergencies. HEMS Foundation would also be able to provide the best of orientation training for medical personnel and maintain medical equipment and manage HEMS in a neutral fashion. As a policy, the services of doctors and paramedics along with emergency medical equipment will be offered by HEMS foundation on a not for profit basis to the State Govts willing to introduce low cost HEMS under CSR.

How do we move forward?

17.HEMS is to be a part of the Health Care System. A coordinating agency (preferably a not for profit organisation such as HEMS Foundation) is required to coordinate the successful handling of the task.

18.It must establish a system which provides efficient coordination between caller, dispatcher, first responder, ground ambulance, air ambulance and appropriate hospital. These services should be available to Aam Admi.

19.Moreover, this system must be made functional by enabling regulations, putting the required resources in place and adequate funding whether Govt. aided or private.

In the West, these have been ensured to make the system viable. The same is needed to be done in India.

Recommendations

20.To set up a HEMS Mission (possibly in Ministry of Civil Aviation) for ensuring a coordinated, well-orchestrated and planned growth takes place in this segment of the Industry.

21.Health being the duty of the State towards every citizen, HEMS may be introduced by Ministry of Health regardless of cost for people living in remote, mountainous and population centers where appropriate treatment is not available owing to lack of specialty hospitals.

22. Govt may encourage establishment of Trusts/Societies to promote the use of the helicopter in HEMS role on a sustainable basis (example: London's Air Ambulance. It is a

Helicopter Emergency Medical Service (HEMS), which responds to seriously ill or injured casualties in and around London, England. London's Air Ambulance is a registered charity (Number 801013) and the service is funded through charitable donations and corporate donors, most notably by the Virgin Group and Investec etc. Set up in 1990, HEMS began to fly from the rooftop of the Royal London hospital. By 2005, it had flown some 17,000 missions).

23. Govt may establish a single coordinating agency (such as RWSI/HEMS Foundation of India) to coordinate HEMS operations at National level. It should assist in Govt evolving suitable policies to encourage hospitals in acquiring helicopters (with space to accommodate number of stretchers and medical equipment) in meeting the requirement of mass casualty events.

24. MOCA must review regulatory measures adapted by DGCA to permit growth of HEMS for public good. It should also review ATC procedures to accord priority in departures /arrivals of helicopters involved in EMS to meet golden hour requirement.

25. For development of Heliports/ Helipads, MOCA may Consider establishment of a Heliport Cell at AAI to oversee the development of Heliports & Vertiports and Heli-routes in the country as there are no public use heliports in the country established by AAI.

26. MOCA may request State Govts and National Highway Authority (NHA) to develop Public use heliports for HEMS. It may also involve private sector to develop heliports/helipads on fast track. It should encourage development of low cost heliports at every district headquarters and consider using old airports for general aviation and helicopter operation.

27. AAI may issue clear cut advisory circulars for the design, construction and operation of Roof Top Heliports and Hospital Heliports especially in metros. It should review ATC Procedures for Helicopters with a view to establish a dedicated and separate departure/arrival area with standardized route operating procedures for conducting HEMS missions as quickly as possible after the requirement for the mission arises.

28. HEMS should be categorized by AAI as "on demand service" and may be conducted in response to an immediate demand, which cannot be anticipated or scheduled several days in advance. It may grant route authority to licensed helicopter operators to fly specified approved routes that would be a workable method. Then, no further mission approval would be required for the licensed helicopter operator, other than filing of the standard flight plan for a mission immediately prior to departure.

29. To reduce cost of HEMS, AAI may exempt Radio Navigation Flight Charges (RNFC).