Executive Summary

1. Why did we do this performance audit?

Armed Forces Medical Services (AFMS) is one of the critical logistics arms of Defence Services both in war and in peace. The objective of the AFMS is to preserve and promote the health of the Armed Forces personnel and their families by prevention of diseases and care and treatment of the sick and wounded among them.

AFMS is an inter services organisation headed by Director General Armed Forces Medical Services (DGAFMS) who functions directly under the Ministry of Defence. DGAFMS at the apex level is assisted by the Directors General Medical Service for the Army, Navy and Air Force who are responsible for overseeing the functioning of the hospitals of the respective Services.



There are 133 Military Hospitals (Army-111, Navy-10 & Air Force-12) of varying bed strengths spread throughout the country in addition to 90 Field Hospitals in field areas.

AFMS, in April 2003, assumed the

responsibility for treatment of Ex-servicemen and their families as and when referred by the Ex-servicemen Contributory Health Scheme (ECHS) polyclinics.

Considering the pivotal role of the organisation to keep the Armed Forces personnel healthy, we undertook this performance audit to assess how well the organisation is equipped and also the extent to which it was performing the assigned role, keeping efficiency, effectiveness and economy in mind.

2. What does this performance audit cover?

We took up the performance audit to obtain reasonable assurance that:

- There existed a sound budgetary formulation, control and expenditure management system conforming to the General Financial Rules;
- Hospitals are adequately manned with doctors, nurses and paramedical staff and are equipped with modern medical equipment;
- Sound practices existed for ensuring economy in procurement, inspection and timely supply of drugs to hospitals/ patients;
- Hospital administration including bio medical waste management was effective; and

> The nascent organisation of ECHS has been provided with necessary infrastructure, medical equipment, drugs and human resources.

3. Our audit findings

Increasing trend in local procurement of drugs

During the period from 2006-07 to 2010-11, the allotment of funds for local purchase (LP) of drugs increased significantly from \gtrless 157.73 crore to \gtrless 371.34 crore, an increase of 135 *per cent*, against a marginal increase (11 *per cent*) in allotment for central purchase (CP). As LP is intended to meet requirements of ad hoc and urgent nature, the major shift in the trend of allocating budget in favour of LP was contrary to the obvious advantages of centralised procurement in terms of quality and cost.

(Paragraph 2.2)

Disconnect between Annual Acquisition Plan and Budget allotment

Annual acquisition plans reflect the plan for procurement of items for modernisation of AFMS covering both revenue and capital items. There was a huge backlog of \mathbb{R} 943.41 crore, as of March 2011, against the approved Annual Acquisition Plan (AAP), making the plans largely irrelevant as far as procurement of capital items is concerned. The huge cumulative backlog of the AAP shows that the implementation has been rather slow and tardy due to processing delays.

(Paragraph 2.4)

Critical shortage of Medical officers in hospitals



Manpower in medical services is a critical component having a direct bearing on patient care. There was an overall shortage of 12 *per cent* Medical Officers (MO) in hospitals. Barring the Tertiary care hospitals (CH & Spl centers), deficiency existed in the chain of medical care of Army at Field Hospitals (36 *per cent*), Peripheral (6 *per cent*), Mid Zonal (19 *per cent*) and

Zonal hospitals (nine *per cent*). Even among the Command and Specialist hospitals the posted strength varied from (-) 25 *per cent* in Udhampur to (+) 93 *per cent* in R&R Hospital Delhi. The cumulative deficiencies in Field, Peripheral, Mid Zonal and Zonal hospitals with surpluses in Tertiary care units is indicative of non-rationalisation in posting of the MOs against authorization.

(Paragraph 3.1)

Recruitment through Armed Forces Medical College (AFMC)

Medical cadets passing out of AFMC are liable to serve the Services. During the years 2007 to 2010, 73 of the 508 successful cadets opted out of service liability by paying the bond money of ₹ 15 lakh as fixed by the Ministry in September 1998. Obviously, the bond money of ₹ 15 lakh was not a sufficient deterrent in arresting the exodus.

(Paragraph 3.2)

Shortage of specialists

MBBS doctors acquiring appropriate qualifications are graded as specialists/ super specialists. As of March 2011, the specialists/super specialists held were 1919 against the authorisation of 2217 (2295 minus the reserve of 78) indicating a deficiency of 298 (14 *per cent*).

Attrition of specialists

During 2006-10, 190 specialists had left the service on grounds of supersession in service. Maximum attrition of specialists had taken place in those disciplines where deficiencies already existed.

(Paragraph 3.3)

Deployment of nursing staff and paramedical staff

As in the case of medical officers, there was disparity in the deployment of nurses and paramedical staff across various hospitals. In CH SC Pune, CH WC Chandimandir, AH R&R, BH Delhi Cantt and MH Jaipur, nursing staff was short by 39 *per cent*, 30 *per cent*, 21 *per cent*, 3 *per cent* and 25 *per cent*. At CH WC Chandimandir, BH Delhi Cantt and MH Jaipur paramedical staff was in excess by 4 *per cent*, 15 *per cent* and 8 *per cent* respectively, whereas it was short by 15 *per cent* and 23 *per cent* at CH SC Pune and AH R&R.

(Paragraphs 3.4 & 3.5)

Huge shortage of scaled electro-medical equipment

As of December 2010, there was deficiency of at least 22,108 equipment in different hospitals, with reference to the authorised scales for which no procurement was made to make up the projected deficiencies.

Alarming deficiency of critical equipment



We examined the holding of 20 equipment vis-à-vis the authorization at 28 hospitals. Most of the hospitals were alarmingly deficient in equipment such as portable multi channel ECG, bedside monitor heart rate display, DC defibrillator, Nebuliser electric, Portable ultrasound unit, etc.

(Paragraph 4.2)

Downtime of medical equipment

The downtime of 51 medical equipment in 10 hospitals valuing ₹ 16.35 crore, ranged from 01 month to 12 months due to delay in repair by the Command Repair Cells and AFMSD Pune.

(Paragraph 4.7)

Vendor registration

The system of vendor registration was flawed as the hospitals registered even those firms which had made a false declaration; or/and did not produce certificate of Good Manufacturing Practice (GMP) issued by the State or Central authorities, Dealer licence and valid drug licence at the time of registration.

(Paragraph 5.4)

Central procurements through Rate Contracts

Normally Rate Contracts (RC) are executed to enable procurement officers to procure indented items with economy of scale. However, as of March 2011, RCs were in force only in respect of 44 items (6 *per cent of total items*) which resulted in local purchase at higher cost.

Local procurement of items available under RC



Even where DGAFMS had concluded RCs, our test check showed that six hospitals procured drugs from other than RC firms at higher rates. Similarly, Command Hospital, Pune, AFMSDs Delhi, Mumbai and Lucknow procured goods locally at rates higher than the DGS&D RC rate.

(Paragraph 5.5)

Local procurement of drugs at inexplicably varying rates

Inexplicable wide variation in the rates of procurement by different hospitals in respect of common drugs was prevalent. For example for Oral Rehydration Powder (PVMS-011688) the rate varied from ₹1.58 {CH (AF) Bengaluru} to ₹12.93 (INHS Ashwini) and for Voveran Gel (PVMS-012920) it varied from ₹6.98 (MH Ambala) to ₹ 59.17 (INHS Jeevanthi). In respect of Digene (170 ml bottle) local purchase rates varied from ₹ 9.50 per bottle (AH R&R) to ₹41.50 (178 MH). Similarly the procurement rate of Inj Dextrose varied from ₹12.8 (CH WC) to ₹ 150 (MH Kirkee).

The fact that there are huge price variations in local procurements of drugs across various hospitals ranging upto even 100 times implies one of the following two possibilities:

- Drugs are being procured locally at exorbitant prices; and
- Drugs are being supplied at freakishly low prices, calling into question their quality, given the fact that supplies in local procurements are accepted in hospitals based on only visual inspection by a board of officers.

(Paragraph 5.7)

Overstocking of drugs

AFMSD Delhi was holding 210 drugs valuing ₹ 3.80 crore in excess of the requirement. Out of the 210 drugs the quantity held in respect of 96 drugs, constituting 46 *per cent*, would be sufficient for more than two years, by which time their life would have expired. In the case of some of the medicines, overstocking was so huge that it covered the requirement of 6 to 109 years based on the average monthly maintenance figure. Similarly, AFMSD Mumbai was holding 460 drugs in excess, of which the stock of 197 drugs (constituting 43 *per cent*) would be sufficient for a period of more than two years, by which time the life would have expired.

(Paragraph 5.9)

Procurement of drugs with less than prescribed shelf life

The stocking policy laid down by DGAFMS requires the AFMSDs to accept expendable stores with residual life of at least five-sixth of their normal life. Test check for the month of December in 2008, 2009 and 2010 at AFMSD Lucknow revealed that 22 items valuing ₹ 46.64 lakh having shelf-life less than prescribed were accepted. The position was even worse in AFMSD Delhi where 52 such items valuing ₹ 2.00 crore were accepted. AFMSD Mumbai had accepted 20 such items valuing ₹ 23.07 lakh.

(Paragraph 5.10)

Quality inspection

The Director General of Quality Assurance (DGQA) is mandated to carry out inspection of all purchases against the RC and local purchases where the order value exceeds \gtrless 1.5 lakh. However, we noticed that the DGQA authorities designated for the inspection were underequipped for conducting such tests, which compromised the quality of inspection. We also observed that in a large number of cases drugs were accepted by the CH WC, AH (R&R), CH SC, AFMSD Mumbai without the Inspection Note. Acceptance of drugs without Inspection Note carries the risk of acceptance of substandard drugs.

(Paragraph 5.14)

Deficiency in storage accommodation

Cool room and cold storage accommodation in hospitals are intended to preserve the life as well as the quality of medical stores. We noticed that in the test checked hospitals across the country deficiency in cool room ranged from 11 to 100 *per cent*, that of cold storage from 10 to 100 *per cent* and of overall medical storage accommodation from 5 to 100 *per cent*.

Deficiency in ambulances

During July 2008 to July 2011, the deficiency of four stretcher ambulances increased from 48 *per cent* to 57 *per cent*. Of the 23 hospitals reviewed during the performance audit, where the holding of ambulances against the authorisation was examined, only nine hospitals had ambulances as authorised, one was holding surplus while deficiency was there in 13 hospitals. The deficiency was the highest at MH Jaipur (50 *per cent*) followed by MH Ambala (46 *per cent*), MH Jabalpur (40 *per cent*), MH Jodhpur (36 *per cent*), MH Gaya (33 *per cent*) and CH SC (29 *per cent*).

(Paragraph 6.2)

Bio-Medical Waste

Under the Bio-Medical Waste (Management & Handling) Rules 1998 all Health Care Establishments (HCEs) generating bio-medical waste are required to apply to the prescribed authority for authorization for management and handling of bio-medical wastes. Of the 280 HCEs in the Army, 241 (87 *per cent*) were not holding valid authorisation as of March 2011. In Air Force, 99 HCEs out of 162 (61 *per cent*) and in Navy, 2 HCEs out of 10 (20 *per cent*) did not renew their authorisation as of March 2011. As valid authorisation under the rules is not available to a large number of HCEs, their capacity to handle bio medical waste in accordance with these rules is suspect.

(Paragraph 6.4)

Creation of infrastructure

As per the scheme sanctioned in December 2002, the infrastructure was to be created within four years in 104 polyclinics at military stations and in 123 polyclinics at nonmilitary stations within five years. While the scheme had nearly met the objective of creating infrastructure in military stations, in respect of non-military stations the infrastructure was established in only 15 *per cent* of the polyclinics as of February 2011.

(Paragraph 7.2)

Deficiency in manpower

Deficiency of Medical Specialists and Gynecologists in ECHS was as high as 27 *per cent* and 31 *per cent* respectively as of March 2011. The deficiency in respect of all categories of medical officers was more in the polyclinics located in non-military stations than in the military stations, adversely affecting patient care by the former.

(Paragraph 7.3)

Equipment

Even as X-ray machines were provisioned to all the 227 polyclinics, radiographers to operate them have not been sanctioned for 79 military polyclinics. As a result, at many places, the X-ray machines were not utilised and therefore were either transferred to military hospitals or were lying idle.

Downtime and non-functioning of medical equipment

Thirty six equipment remained intermittently un-serviceable at 18 polyclinics during 2008-10 for periods ranging from one month to 36 months. As of March 2011, 18 equipment (seven X-ray machines, nine Dental chairs and two Semi auto analysers) at 17 polyclinics located at non-military stations were non functional since January 2010.

Low availability of medical stores

The ECHS Polyclinics are dependent on AFMSDs as well as nearest service hospitals for medical stores.

The AFMSD Mumbai did not stock 35 vital and essential drugs (52 *per cent*), while the stock of nine drugs (13 *per cent*) was less than the requirement as per the monthly maintenance figure (MMF). The AFMSD Delhi Cantt did not have stock of 10 essential drugs (15 *per cent*) and for 24 drugs (36 *per cent*) the stock was less than MMF. Thus the depots were unable to provide the vital and essential drugs to ECHS polyclinics.

Inadequacy of empanelled hospitals

In the non-military stations the beneficiaries have to solely rely on the empanelled hospital for treatment. No empanelled hospital was available to ECHS beneficiaries at 15 non-military stations (20 *per cent*) and at an equal number of military stations (21 *per cent*). Thus, in the absence of empanelled hospitals the beneficiaries in those non-military stations were deprived of hospital care.

(Paragraph 7.5)