

**Report of the
Comptroller and Auditor General of India**

On

Hospital Management in Indian Railways

for the year ended March 2013

Laid in Lok Sabha/Rajya Sabha on _____

**Union Government (Railways)
Report No. 28 of 2014
(Performance Audit)**

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PREFACE

This Report for the year ended March 2013 has been prepared for submission to the President of India under Article 151 of the Constitution of India.

This Report of the Comptroller and Auditor General of India contains the results of review of Hospital Management in Indian Railways for the period 2008-2013.

The instances mentioned in this Report are those, which came to the notice during the course of review as well as those which came to notice in earlier years, but could not be reported in the previous Audit Reports; matters relating to the period subsequent to 2013-14 have also been included, wherever necessary.

The audit has been conducted in conformity with the Auditing Standards issued by the Comptroller and Auditor General of India.

Audit wishes to acknowledge the cooperation received from Ministry of Railways at each stage of the audit process.

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Abbreviations used in the Report

ACMS	Assistant Chief Medical Superintendent
ADMO	Assistant Divisional Medical Officer
ADA	Adra
ARME	Accident Relief Medical Equipment
AE	Actual Expenditure
AMI	Annual Medical Indent
ASC	Assistant Security Commissioner
AMC	Annual Maintenance Contract
BAM	Brahmapur
BCT	Mumbai Central
BG	Budget Grant
BKI	Bandikui Jn
BWT	Bangarapet
BZA	Vijayawada
BY	Byculla
BBS	Bhubaneswar
BNDM	Bondamunda
BNZ	Badshahnagar
CR	Central Railway
CLW	Chittaranjan Locomotive Works, Chittaranjan
CHD	Chief Health Director
CH	Central Hospital
CGHS	Central Government Health Scheme
CMP	Contract Medical Practitioner
CME	Chief Mechanical Engineer
COS	Controller of Stores
CSTM	Chatrapathi Sivaji Terminal
CT	Computerized Tomography
DRF	Depreciation Reserve Fund
DF II	Development Fund II
DLW	Diesel Locomotive Works, Varanasi
DMW	Diesel-Loco Modernisation Works, Patiala
DG (RHS)	Director General (Railway Health Services)
DMO	Divisional Medical Officer
DH	Divisional Hospital
DLS	Diesel Loco Shed
ED (Health)	Executive Director (Health)
ER	Eastern Railway
ECR	East Central Railway
ECoR	East Coast Railway
ENT	Ear, Nose and Throat
ED	Erode

EDH	Extra Divisional Hospital
FG	Final Grant
FA & CAO	Financial Advisor and Chief Accounts Officer
FW	Family Welfare
GD	Gonda Jn.
GDMO	General Duty Medical Officers
GTL	Guntakal
GOC	Golden Rock
HU	Health Unit
HVS	Honorary Visiting Specialist
HMIS	Hospital Management Information System
H & FW	Health and Family Welfare
HoD	Head of Department
IRMM	Indian Railway Medical Manual
ICU	Intensive Care Unit
I/C	In-Charge
ICF	Integral Coach Factory, Perambur
IRMS	Indian Railway Medical Service
JUDW	Jagadhari Workshop
JRH	Jagjivan Ram Zonal Hospital, Mumbai Central
KUR	Khurda Road
KZJ	Kazipet
KLX	Kapurthala
LLRH	Lala Lajpat Rai Hospital, Kapurthala
LGD	Lallaguda, Secunderabad
LD	Liquidated Damages
L 1	Lowest Tenderer
LP	Local Purchase
LKO	Lucknow
MR	Metro Railway
MD	Medical Director
M&P	Machine and Plant
MBBS	Bachelor of Medicine, Bachelor of Surgery
MBNR	Mahabubnagar
MB	Moradabad
MD	Doctor of Medicine
MoU	Memorandum of Understanding
MLG	Maligaon
MRI	Magnetic Resonance Imaging
MYS	Mysore
NR	Northern Railway
NCR	North Central Railway
NDLS	New Delhi
NER	North Eastern Railway

NFR	Northeast Frontier Railway
NWR	North Western Railway
NACO	National Aids Control Organization
NHP	National Health Programme
NED	Nanded
OLWR	Open Line Works Revenue
PU	Production Unit
PC	Poly Clinic
PO	Purchase Order
PPP	Public Private Partnership
PHU	Primary Health Unit
PGT	Palghat
PTA	Patiala
PFA	Prevention of Food Adulteration Act 1954
PER	Perambur
RCF	Rail Coach Factory, Kapurtala
RDM	Ramgundam
RELHS	Railway Employees Liberalised Health Services
RWF	Rail Wheel Factory, Yelahanka
BITES	Rail India Technical and Economic Service
RPF	Railway Protection Force
RPU	Railway Production Units
RYPS	Rayanpadu
SR	Southern Railway
SCR	South Central Railway
SER	South Eastern Railway
SECR	South East Central Railway
SO	Section Officer
SWR	South Western Railway
SDH	Sub Divisional Hospital
Sr. DMO	Senior Divisional Medical Officer
SPCB	State Pollution Control Board
SG	Selection Grade
SBC	Bangalore City
TBAI	Tuberculosis Association of India
T & A	Technical and Administration
UPSC	Union Public Service Commission
UBL	Hubli
VSKP	Visakhapatnam
VZM	Vizianagaram Jn.
WR	Western Railway
WCR	West Central Railway
WSH	Workshop Hospital

EXECUTIVE SUMMARY

1. Hospital Management in Indian Railways

Indian Railways provide medical and health services to 64 lakh railway beneficiaries through 129 hospitals and 588 Health Units spreading over 17 Zonal Railways (ZRs) and five production units. Director General /Railway Health Service is the head of Railway health care services which includes maintenance of sanitation, cleanliness and provision of safe drinking water besides providing prompt relief to passengers injured or taken seriously ill in trains or at railway stations.

This report focuses on the performance of hospitals in budgetary control, effective utilization of available manpower and assessing the efficiency in hospital administration. A sample of 17 Central Hospitals, one Super Specialty Hospital, five Production Unit Hospitals, 41 Divisional/Sub-divisional Hospitals and five workshop hospitals were selected for review. In addition, 89 Primary Health Units /Dispensaries were also selected for detailed examination.

Audit observed that there was lack of effective budgetary control. Besides variation between the final grant and the actual expenditure, there was idle investment due to improper planning. Shortage of doctors and paramedical staff had partially affected the medical and health services to patients. Medical equipment remained idle due to non-availability of skilled professionals resulting in avoidable reference to non-railway hospitals.

Incorrect assessment of requirement led to surplus and loss of shelf life of medicines. Adequate infrastructure for storage and preservation of drugs was not available in many hospitals across ZRs. Despite having incurred considerable expenditure towards repair and maintenance, audit observed several instances of failure of medical equipments. Hospital Management Information System, which was conceived in 1992-93 to take care of documentation regarding uniform Medical Identity Cards across Zonal Railways including periodical updating, maintenance of Medical History Folders and actual beneficiary data, could not be implemented till July 2014. Major Audit findings are mentioned below:

2. Major Audit Findings

- I. *The revenue expenditure of Health Directorate of Railway Board constituted only 2.68 per cent of ordinary working expenses of IR. (Para 2.2)*
- II. *Capital expenditure was only four per cent of total medical expenditure during 2008-13. There was idle investment of ₹17.64 crore due to improper planning in developing Nursing College and Hostel at Majherhat/ER. (Para 2.3)*
- III. *Shortage of doctors and paramedical staff resulted in idling of medical equipments and increased dependence on hired medical practitioners/specialists with no accountability imposed on them. Despite spending ₹80.23 crore towards engagement of contract medical practitioners/specialists, expenditure of ₹1146 Crore incurred towards treatment in non-railway hospital during 2008-13 could not be avoided. (Para 3.1.1 - 3.1.4)*
- IV. *Deficiencies in the registration of vendors for supply of medicines were observed in seven Zonal Railways. Centralized Procurement was delayed due to delay in finalization of tenders, delay in issue of purchase orders and delayed supply by the firms which contributed to the significant increase (66 per cent) in local purchase of medicines. Local purchase of medicines exceeded the permissible limit of 15 per cent of the total budget allotment across Zonal Railways. In IR, there is no uniform list of Proprietary Article Certificate (PAC) items. Medicines procured under PAC category at higher rates on Single Tender basis resulted in loss of ₹ 30 lakh. (Para 4.1.1, 4.1.2 and 4.1.3)*
- V. *There was lack of proper storage facilities in many hospitals across Zonal Railways. In Central Railway, medicines costing ₹0.75 crore were destroyed by fire in AC drug store room due to defective air conditioner and improper storage of combustible x-ray films. No periodicity for departmental stock verification was prescribed in the Indian Railways Medical Manual. As a result, stock verification was not conducted in eight Zonal Railways and in four Production Unit hospitals. (Para 4.2 and 4.3)*

- VI. *The existing inventory management system was not adequate to minimise arising of surplus medicines. In five Zonal Railways, Shelf life of medicines worth ₹ 24.18 lakh expired and could not be utilized. Medicines valued ₹ 7.57 lakh were also declared surplus in two Zonal Railways.* **(Para 4.1.2 and 4.4)**
- VII. *Out of eight Zonal Railways where substandard drugs were supplied, in four Zonal Railways drugs were consumed before receipt of the test results.* **(Para 4.5)**
- VIII. *There was a delay in procurement of medical equipments costing ₹ 40.69 crore. 56 medical equipments procured at a cost of ₹ 20.73 crore in nine ZRs and in two Production Unit hospitals were either not in working condition or commissioned belatedly. One medical equipment procured by a hospital in WR at a cost of ₹ 62 lakhs remained unutilised for 28 months out of 60 months of its codal life.* **(Para 4.6)**
- IX. *Health Directorate in the Railway Board failed in developing Hospital Management Information System in the last two decades even after spending ₹ 66 lakh. This had resulted in poor documentation in regard to beneficiary data, Medical Identity Cards and maintenance of Medical History Folders.* **(Para 5.1 and 5.2)**
- X. *Lack of adequate medical facilities in railway hospitals resulted in referral expenditure of ₹ 1145.98 crore during 2008-13 for treatment of 2.96 lakh patients in non-railway hospitals.* **(Para 5.3)**
- XI. *Authorization for management and handling of bio medical wastes was not obtained by 27 selected hospitals/Health Units over five ZRs during 2008-10. Bio-medical wastes were improperly disposed of either by deep burial or burning in the open air.* **(Para 5.7)**
- XII. *Telemedicine facilities were not available in seven Zonal Railways and four production unit hospitals. Telemedicine facilities provided in four Zonal Railways (NEFR, SECR, SR and WR) were either not in working condition or remained unutilised.* **(Para 5.9.4)**

3. Recommendations

- I. *Health Directorate of Railway Board and Chief Medical Directors (CMDs) of Zonal Railways (ZRs) need to strengthen the process of formulation of budget with due consideration to the number of beneficiaries/patients and the infrastructural needs of the hospitals. The trend of allocation of fund for capital expenditure particularly in respect of medical equipments needs review for creating better medical facilities so as to minimise reference to non railway hospitals;*
- II. *Health Directorate of Railway Board needs to prioritise its initiative to fill in the existing vacancies in Doctors/Paramedics cadre instead of depending on hiring specialists and engaging contract medical practitioners. Available resources require rationale deployment by CMDs of ZRs on the basis of bed strength and number of patients being treated in the hospitals. Railway Board also needs to take effective steps for recruitment of specialists on regular basis;*
- III. *Health Directorate of Railway Board needs to strengthen the process of Centralised Purchase and adopt a uniform PAC list of medicines to minimise dependence on local purchase of medicines at higher rates;*
- IV. *Health Directorate of Railway Board and CMDs of ZRs need to ensure drug analysis within the prescribed time frame to prevent recurrence of supply of sub-standard drugs;*
- V. *Health Directorate of Railway Board needs to expedite the implementation of Hospital Management Information System so as to maintain Medical History Folders electronically and introduce Medical Identity Cards with photograph of individual beneficiary;*
- VI. *Health Directorate of Railway Board and CMDs of ZRs need to ensure periodical revision of diet charges recoverable from the indoor patients. In the Memorandum of Understanding with the non-railway hospitals for treatment at package rates, specific provision relating to diet charges may be incorporated; and*
- VII. *Health Directorate of Railway Board and CMDs of ZRs may provide proper bio-medical wastes treatment facilities in all hospitals of Zonal Railways.*

Chapter 1 → Introduction

Indian Railways (IR) provide medical and health services to about 64 lakh railway beneficiaries which include serving, retired employees and their dependent family members through 129 hospitals¹ and 588 Health Units. During 2008-13, IR provided treatment to 11.67 crore patients. It has adopted the Mission Statement - "*Total patient satisfaction through humane approach and shared commitment of every single doctor and paramedic to provide quality health care using modern and cost effective techniques and technologies*".

The medical and health facilities are provided at three levels - Primary², Secondary³ and Tertiary⁴. While the Health Units (HUs) cater to the primary health care, Sub-divisional /Divisional, Workshop hospitals and Central Hospitals (CHs) cater to the secondary health care. HUs are located at important stations over all divisions with the beneficiaries jurisdiction extending to more than 100 Km. Some of the Central Hospitals such as CH/Perambur (SR), CH/Byculla (CR), CH/Mumbai Central (WR) etc. have specialty facilities wherein tertiary care is also provided. In addition, railway beneficiaries are referred to the empanelled non-railway hospitals for higher secondary and tertiary care.

The responsibilities regarding medical and health services of IR include maintenance of sanitation, hygiene, cleanliness, safe drinking water and food, scientific disposal of hospital waste etc. besides providing prompt relief to passengers injured or taken seriously ill in trains or at railway stations.

¹ 17 Central Hospitals, one Super Specialty Hospital, 55 Divisional Hospitals, 42 Sub Divisional Hospitals, 9 Workshop Hospitals, 5 Production Units Hospitals.

² Primary health care refers to essential health care facilities for providing immediate attention to patients.

³ Secondary health care refers to services provided by medical specialists which includes acute care necessary treatment for a short period of time for a brief but serious illness, injury or other health conditions.

⁴ Tertiary care refers to third level of health system in which specialized consultative care is provided usually on referral from primary and secondary medical care.

1.1 Organisation Setup

At the Railway Board level, Director General (Railway Health Service) is the head of Railway health care services under the Member (Staff) of the Railway Board. In the Zonal Railways (ZRs), Chief Medical Director (CMD) is the head of all Divisional/Sub-Divisional Hospitals and HUs including hospitals attached to workshops. However, all proposals in regard to procurement of medical equipment are routed through Chief Mechanical Engineer (CME) of the Zonal Railways. Organisation Structure of medical and health services of IR is shown in *Appendix – I*.

1.2 Audit Objectives

The Review was conducted to see:

- I. Whether effective budgetary controls were in place to ensure appropriate allotment and utilization of funds;
- II. Whether the assessment and recruitment of man-power were realistic and also to see whether the available manpower was effectively utilized;
- III. Whether there was a mechanism in place for ensuring economy and efficiency in procurement of medicines, its storage, procurement of medical equipment and physical verification; and
- IV. Whether the Hospital Administration including maintenance of data on patient care, treatment facilities and waste management was efficient.

The review covered the issues relating to medical and health services provided to the railway beneficiaries during the period 2008-13.

1.3 Sources of Audit Criteria

The criteria for evaluation of performance of medical and health services of Indian Railways were derived from the provisions contained in the existing codes and manuals⁵ of Indian Railways as amended from time to time.

⁵ *Indian Railway Medical Manual Volume – I and II*

Policies framed and instructions issued by the Ministry of Railways (Railway Board) including provisions laid down in various Acts⁶, Rules, Regulations issued by the Government of India and notifications issued by the Pollution Control Boards were also taken into consideration.

1.4 Scope and Audit Methodology

Audit examined the performance and measures taken by the hospitals and Health Units during 2008-13 for providing medical and health services to railway beneficiaries. Audit also examined the availability of required manpower and their rationale utilization, procurement of medicines/equipments in addition to efficiency in hospital administration.

The Performance Audit commenced with an Entry Conference (July 2013) with the Director General (Railway Health Service) and Advisor (Finance) of RB and Chief Medical Directors and Financial Advisor & Chief Accounts Officers at the Zonal Headquarters wherein the audit objectives, scope of study and methodology were discussed. The Draft Review Report was issued to the Railway Board in May 2014. The audit findings were discussed in an Exit Conference held in July 2014 with the Director General (Railway Health Service) and Advisor (Finance) at the Railway Board. Similar Exit Conferences were also held by the Principal Directors of Audit with the Chief Medical Directors and Financial Advisor & Chief Accounts Officers at the Zonal levels. The views of the Railway Board on the audit findings have been suitably incorporated in the report.

In addition to examination of records of all the 17 Zonal Railways and Production Units, records relating to guidelines and instructions issued by the Health Directorate of Railway Board involved in policy formulation and issue of directives to zones for their implementation were also examined.

⁶ *The Air (Prevention and control of Pollution) Act 1981, The water (Prevention and control of Pollution) Act 1974, PFA 1954/Food Standards and Safety Act, Bio-medical waste (Management and Handling) Rules, 1998, Drug and Cosmetics Act 1945 and instructions issued by the Pollution Control Boards of States and Municipal Corporations from time to time on waste management and disposal of biomedical waste.*

All Central Hospitals (17), one Super-specialty at Varanasi and five hospitals attached to Production Units were selected (100 *per cent*) for detailed study. In addition, a sample of 22 out of 55 Divisional Hospitals, 19 out of 42 Sub-Divisional Hospitals and 5 out of 9 Workshop Hospitals were selected. 89 out of 588 Primary Health Units were also selected for detailed examination. Statement showing sample selection and a list of selected hospitals and Health Units is shown in *Appendix-II*

Joint Inspections of hospitals were conducted by Audit along with the officials of medical department to assess the performance of medical and health services in regard to cleanliness, maintenance of medical equipment, storage facilities for medicines, disposal of bio-medical waste etc.

1.5 Acknowledgement

The co-operation extended by the Zonal Railways, Production Units and also by the Railway Board in conducting this review is acknowledged.

Chapter 2 → Financial Management

Audit objective 1

To see whether effective budgetary controls were in place to ensure appropriate allotment and utilization of funds.

Sound principles of financial prudence, budgetary practices and control over expenditure are essential for effective and efficient use of the scarce budgetary resources. Indian Railways provides for both revenue and capital expenditure to provide medical and health services to its beneficiaries. Revenue Expenditure on medical services inter-alia includes Salaries and Allowances of Hospitals and Dispensaries, Cost of Medicines, Reimbursement of Medical Expenses, Public Health, Maintenance of Equipment, Sanitation in Railway Colonies and Other Welfare Services⁷. Capital Expenditure is incurred towards procurement of equipment and infrastructure development. During 2008-13, Medical Department incurred expenditure of ₹ 9932.22 crore which includes ₹ 9510.70 crore towards revenue expenditure (96 *per cent*) and ₹ 421.52 crore towards capital expenditure (four *per cent*). The revenue expenditure of medical department during 2008-13 was 2.68 *per cent* of the total ordinary working expenses of Indian Railways.

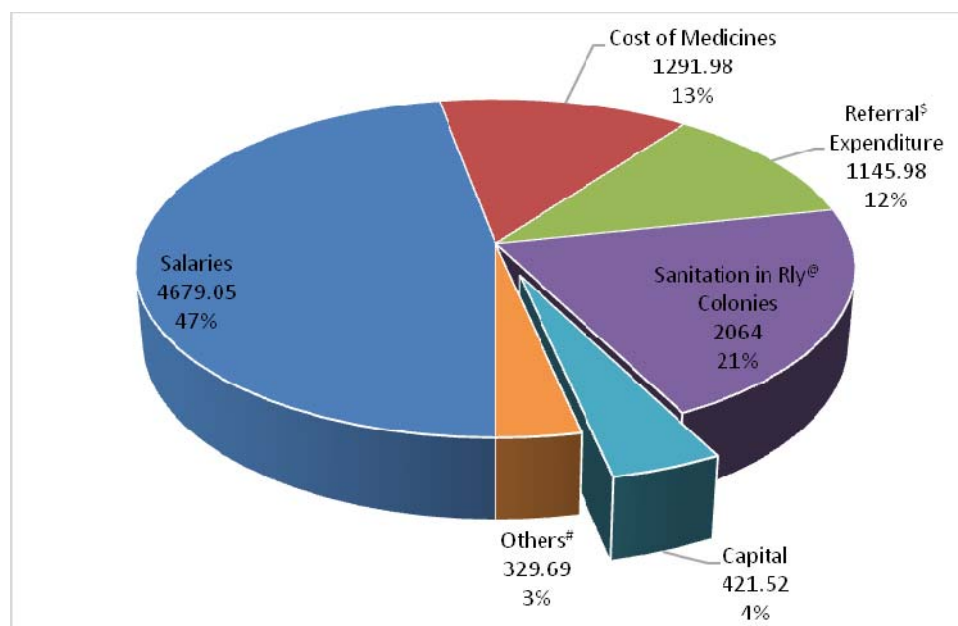
This chapter highlights the budgetary control, utilization of funds and trend of expenditure incurred for the medical and health services of the Indian Railways.

2.1 Trend of Expenditure

The various components of expenditure of ₹ 9932.22 crore incurred by the Indian Railways (IR) during 2008-13 are indicated in the pie diagram below:

⁷ *Other welfare services include Preventive Health Measures and Pest Control*

Figure 1: Share of Expenditure for Medical and Health Services during 2008-13
(₹ in crore)



\$ Reimbursement to the railway beneficiaries for treatment in recognized non-railway hospitals.

@ Expenditure on sanitary staff and stores, payment to conservancy contractors etc.

Cost of malaria, filaria and pest control stores, cost of examination of food and water samples, diet charges, etc.

2.2 Budgeting Revenue Expenditure

Budget estimates for revenue expenditure of the respective medical branch offices at the zonal level are sent to the Railway Board duly approved by the concerned General Manager (GM). The estimates of expenditure are presented to the Parliament in the form of 'Demand for Grants'. After passing of Appropriation Bill by the Parliament, budgetary allocations are made to all the Zonal Railways (ZRs). Further allocation of funds to the spending units is made by the FA & CAO (Budget) of ZRs. In respect of hospitals at Production Units total expenditure relating to medical services provided to their employees is booked to Capital head under Workshop Manufacturing

Suspense Account. The balances under this suspense head are cleared by debiting to the Zonal Railways on the advice of the Railway Board.

The variation⁸ between Actual Expenditure (AE) and the Final Grant (FG) in respect of all the zones ranged between minus 3.08 *per cent* and 1.79 *per cent* during 2008-13. Scrutiny of records of selected hospitals revealed the following:

- I. As against the permissible limit of variation of five *per cent*, variations between BG/FG and AE ranged between 17 *per cent* and 48 *per cent* in seven zones⁹.
- II. In respect of hospitals at five Production Units, actual expenditure vis-à-vis the Final Grant ranged between 12 *per cent* and 53 *per cent* during 2008-13 except in 2010-11 where the actual expenditure was more than the BG/FG as shown in **Appendix III**.
- III. In seven Central Hospitals¹⁰, while the allotment increased during 2008-13, the number of patients had declined during the same period. This indicated that there was no symmetrical correlation between increase/decrease in number of patients and allotment of funds to the hospitals as indicated in **Appendix - IV**.

Railway Board stated (July 2014) that the budgetary grant was asked for based on past experience and the increasing trend of expenditure could be attributed to the rising salaries and inflation. Contention of the Railway Board was not tenable as the actual expenditure was even less than the final grant in some years in certain zones. Moreover, rising salaries and inflation are some of the common factors which are taken into consideration for assessment of funds requirement.

⁸ Minus variation indicates less expenditure over the BG or FG and plus variation indicates expenditure in excess of BG or FG.

⁹ CR (28.53 *per cent* - 2009-10), ER (47.87 *per cent* - 2008-09), NER (22.82 *per cent* - 2008-09), NR (18.24 *per cent* - 2008-09, 18.62 *per cent* - 2010-11), SR (20.23 *per cent* - 2008-09), SWR (25.52 *per cent* - 2008-09), WCR (17.21 *per cent* - 2008-09, 23.56 *per cent* - 2009-10)

¹⁰ CH/ECOR (2009-10, 2012-13), CH/ER (2009-12), CH/NCR (2009-12), CH/NR (2011-13), CH/SWR (2009-10, 2011-13), CH/WCR (2009-10, 2012-13), CH/WR (2009-10, 2011-13)

2.3 Budgeting Capital Expenditure

At the zonal level, the proposals for procurement of equipment of Capital nature are sent to Chief Mechanical Engineer (CME) after obtaining financial concurrence of FA&CAO for inclusion in the Machinery & Plant (M&P) Programme. The M&P items costing upto ₹ 10 lakh are sanctioned at Zonal Level and items costing above ₹10 lakh are forwarded to the Railway Board for sanction. Procurement of all medical equipments is done through the Chief Controllers of Stores (COS). Similarly, the requirement of works relating to infrastructure development such as construction of Health Units/hospitals is being processed through Annual Works Programme.

During 2008-13, hospitals and health units of IR incurred capital expenditure of ₹ 421.52 crore (four *per cent*). The actual capital expenditure incurred by medical department of IR vis-à-vis BG and FG during 2008-13 is shown in the table below:

Table 1: Capital expenditure vis-à-vis Budget Grant and Final Grant during 2008-13 (₹ in crore)

Year	BG	FG	AE	Variation between BG and AE (in per cent)	Variation between FG and AE (in per cent)
2008-09	77.08	63.91	65.56	-14.95	2.58
2009-10	87.25	66.28	78.44	-10.10	18.35
2010-11	137.21	113.57	105.76	-22.92	-6.88
2011-12	90.36	83.92	77.96	-13.72	-7.10
2012-13	154.29	109.64	93.80	-39.21	-14.45

Scrutiny of records of selected hospitals revealed that the actual expenditure incurred was less than the BG in all the years during 2008-13 with the highest under-utilization of 39.21 *per cent* during 2012-13. Some specific cases of improper financial practices noticed are mentioned below:

- I. There was underutilization of fund amounting to ₹ 12.91 crore¹¹ in two ZRs (NWR and SWR);
- II. Excess/unsanctioned expenditure of ₹ 3.17 crore by JR Hospital¹², Western Railway during 2010-11. The actual expenditure was ₹ 4 crore as against the final grant of ₹ 0.83 crore; and
- III. An amount of ₹ 19.92 crore was sanctioned in 2010 for construction of Nursing College and Hostel at Majherhat/ER. The Nursing College was planned on Railway land on Public Private Partnership (PPP) model so as to facilitate the wards of the Railway employees in finding a good vocational avenue. Expression of Interest called (August 2013) from private partners for operation and maintenance did not yield any response. In 2014, the Railway Board sanctioned revised consolidated estimate of ₹ 27.83 crore. Meanwhile expenditure of ₹ 17.64 crore (February 2014) was incurred towards construction of Nursing College and the entire investment became unproductive due to failure of the Railway Administration in identifying private partners and finalizing modalities before investment.

Director General (Railway Health Service) stated (July 2014) that the capital expenditure such as construction of new hospitals and expansion of existing structures were not under the control of medical department. It was further stated that the alternative use of Nursing College and Hostel at Majherhat/ER was under consideration.

¹¹ ₹ 10.29 crore in NWR during 2008-13 and ₹ 2.62 crore in SWR during 2012-13.

¹² Jagjivan Ram Hospital

Chapter 3 → Manpower Management

Audit objective 2

To see whether the assessment and recruitment of man-power were realistic and also whether the available manpower was effectively utilized.

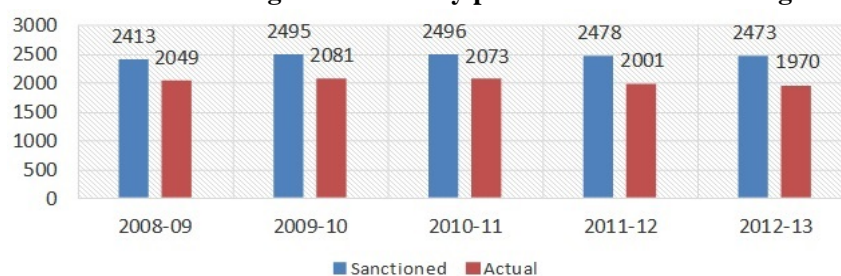
Skilled manpower is the backbone of any service oriented organization. An appropriate assessment of manpower requirements, their recruitment and rationale deployment is essential as they have direct bearing on patient care. This chapter highlights the availability of doctors/ para-medical staff and their irrational deployment, issues regarding engagement of Consultant, Contract Medical Practitioners (CMPs)/ Honorary Visiting Specialists etc.

3.1 Availability of Manpower

3.1.1 Availability of Doctors

There were 1970 Medical Officers as on 1 April 2013 as against the sanctioned strength of 2473 resulting in shortage of 503 doctors (20.34 per cent). This implied that one doctor was available for every 3228 beneficiaries. The vacancies were manned by engagement of Contract Medical Practitioners (CMPs) on a consolidated pay. There is no separate sanctioned strength for engagement of specialists. However, they are engaged for specialised medical services. Sanctioned strength vis-a-vis vacancy position of Doctors in IR during 2008-13 is shown below:

Figure 2: Sanctioned strength and vacancy position of Doctors during 2008-13



Scrutiny of records relating to status of availability of doctors in selected hospitals of ZRs revealed the following:

- I. In four Central Hospitals¹³, shortage of doctors during 2012-13 as against the sanctioned strength ranged between 21 *per cent* and 34 *per cent*. In the remaining 13 Central Hospitals, shortage of doctors was less than 17 *per cent* as shown in **Appendix V**. In seven¹⁴ out of 17 Central Hospitals, number of patients per doctor ratio ranged between 9156 and 20414. In the remaining nine hospitals, patients per doctor ratio ranged between 1876 and 8779 as shown in **Appendix VI**;
- II. Out of five hospitals of Production Units, shortage of doctors in four hospitals¹⁵ during 2012-13 ranged between 22 *per cent* and 38 *per cent* except in hospital at RCF/Kapurthala where there was no shortage of doctors as shown in **Appendix V**;
- III. In 41 divisional/Sub-Divisional Hospitals test checked, there was shortage of 140 doctors during 2012-13 (23 *per cent*) as shown in **Appendix V**. Patients per doctor ratio ranged between 3628 and 54218 as shown in **Appendix VI**;
- IV. Some specific instances of vacancy of doctors in the selected hospitals/Health Units are mentioned below:
 - i. Despite provision for recruitment of Contract Medical Practitioners (CMPs) against vacancies, doctors were not available in Health Unit/VSKP (ECoR) between 2010 and 2012 and Health Unit/Mahboobnagar of SCR between January 2008 and February 2009;
 - ii. Out of five Production Units, Health Unit was available in two Production Units (DLW/Varanasi and CLW/Chittaranjan). It was observed that there was no separate sanctioned strength for

¹³ NWR (21.05 *per cent*), WCR (23.53 *per cent*), NER (33.33 *per cent*) and CR (34.15 *per cent*)

¹⁴ CH/Byculla/ CR, CH/Sealdah / ER, CH / Gorakhpur/NER, CH / Jaipur/ NWR, CH/Hubli/SWR, CH /LGD / SCR, CH/Jabalpur/WCR

¹⁵ CLW/Chittaranjan, DLW/Varanasi, RWF/Yelahanka and DMW/Patiala

- doctors and paramedical staff for HUs attached to these two Production Units. At CLW/Chittaranjan, 19 doctors were available against the sanctioned strength of 25 doctors during 2013. Due to shortage of six doctors, five HUs were managed by three doctors;
- iii. At Workshop Hospital/Jagadhari (NR), there were only three doctors during 2013 against the sanctioned strength of nine doctors;
 - iv. In two ZRs, nine doctors (ER-5 and SCR-4) were on un-authorized absence for a long time. In ER, five doctors were on un-authorized absence during the period from 1999 to 2010. Though action was taken against four doctors, only one doctor rejoined in April 2012. In respect of SCR, no action was taken against the doctors on un-authorized absence;
 - v. As against the sanctioned strength of 14 doctors, the vacancies at Divisional Hospital/Lalgarh (NWR) varied between 36 *per cent* and 50 *per cent* during 2008 -13;
 - vi. At Lala Lajpat Rai Hospital/RCF (Kapurthala), no Ophthalmologist and ENT surgeon were posted during 2008-13 and 2011-13 respectively. There was also no Gynaecologist during 2011-13 and no Orthopaedic surgeon during 2013;
 - vii. In CH/Sealdah (ER), dental ward was run by house staff as no dentist was posted during the 2008-13;
 - viii. At RCF/Kapurthala, seven medical equipment was proposed for transfer to other hospitals due to non-availability of Ophthalmologist and Radiologist; and

- ix. In eight Central Hospitals and twenty Divisional/Sub Divisional Hospital over eight ZRs and two production¹⁶ units hospitals, medical equipments valuing ₹4.38 crore remained idle for different spells during the review period 2008-13. Of them, in three ZRs (SECR, ECoR and NR), medical equipments remained idle for want of doctors skilled in handling those equipments. For instance, Endoscopy and Colonoscopy machines costing ₹ 0.17 crore remained idle since September 2011 at CH/Bilaspur (SECR). Phaco-Emulsification System and operating Eye Microscope costing ₹ 23 lakh procured in January 2008 and June 2011 respectively remained unutilized as no Ophthalmologist was posted at DH/KUR/ECoR, Ultrasonography Department at DH/MB and DH/JUDW of NR was closed for want of specialist doctors.

(Appendix VII)

3.1.2 Deployment of Doctors

In CH/Gorakhpur (NER), Surgeon, Cardiologist, Skin Specialist, ENT specialist were not available. On the other hand, specialists were posted in Health Unit (HU) where only primary care is to be provided. Some instances are mentioned below:

- I. The services of Specialist Doctors are required at Divisional and Central Hospitals where secondary/tertiary health care are provided. Audit observed that an Ortho Specialist was posted at HU at Bangarpet¹⁷ and a Child Specialist at Health Unit at Arsikere¹⁸ (SWR). It was also observed that Ortho-specialist posted at HU/Bangarpet attends DH/Bangalore¹⁹ twice in a week. Deployment of specialist at HU instead of regular

¹⁶ SECR (₹16.87 lakhs),NWR (₹18.99 lakhs), CR (₹0.09 lakhs), ER (₹1.60 lakhs),WR (₹ 3.20 crore),NEFR (₹ 5.00 lakh),NR(₹ 31.60 lakh), ECoR(₹ 12.98 lakh), CLW/Chittaranjan (₹ 13.59 Lakhs) and DLW/Varanasi(₹ 17.10lakh)

¹⁷ HU/ Bangarpet has around 500 beneficiaries and treats 28 to 30 patients per day.

¹⁸ HU at Arsikere has around 1000 beneficiaries and treats 35 to 40 patients per day.

¹⁹ DH Bangalore has around 50000 beneficiaries and treats 375 to 445 patients per day

posting at Divisional Hospitals meant to provide secondary and specialised care was injudicious; and

- II. Out of ten Gynaecologists in SCR, five Gynaecologists were posted at Central Hospital/ Lallaguda. No Gynaecologist, was however, posted at Divisional Hospital, Nanded with 25 bed strength.

Thus, besides shortage of doctors/specialists, irrational deployment of doctors/specialists also contributed to idling of medical equipment.

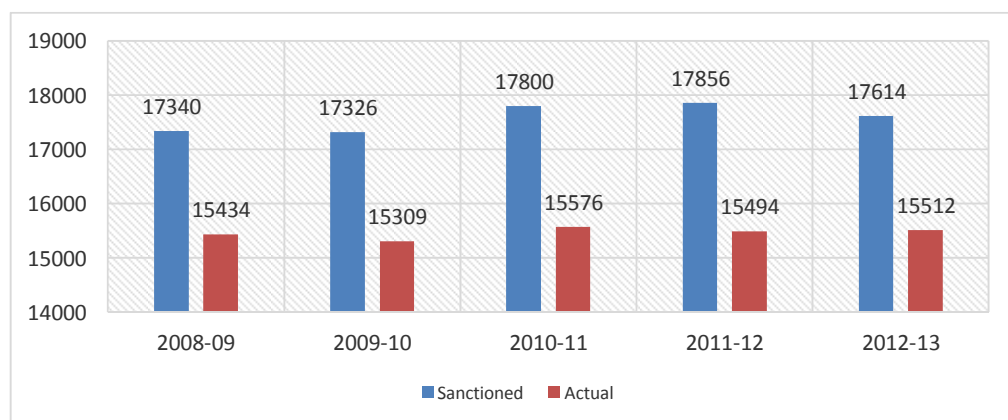
Railway Board stated (July 2014) that due to various factors which were beyond the control of Health Directorate, UPSC selected candidates did not join Indian Railways Medical Services. It was further stated that the vacancy position would improve substantially if the UPSC selected Medical Officers join Indian Railways Medical Services. However, the fact remained that the existing resources were not judiciously utilized as it was observed that in Divisional /Sub Divisional Hospitals which serves around 50,000 beneficiaries and where secondary care is being provided, specialists were not available and on the other hand, specialists were posted at Health Units with lesser population and where only primary care is to be provided.

3.1.3 Paramedical Staff

The paramedical staff²⁰ is a health care professional who works in emergency medical situations and also in initial assessment including diagnosis and a treatment plan to manage the patient's particular health crisis. They are posted in both hospitals and Health Units. The vacancy in paramedic cadre increased by 10 *per cent* from 1906 in 2008-09 to 2102 in 2012-13. Sanctioned strength and vacancy position of Paramedical Staff in IR during 2008-13 is indicated below:

²⁰ *Include nurses, matrons, pharmacist, physiotherapist, health and malaria inspector, radiographer etc.*

Figure 3: Sanctioned strength and vacancy position of Paramedical Staff in IR during 2008-13



On scrutiny of records of the selected hospitals, Audit observed the following:

- I. In five²¹ out of 17 Central Hospitals, number of patients per paramedical staff ranged between 2113 and 3326. At CH/Perambur/SR, the ratio was exceptionally as high as 1:38442. In the remaining 11 hospitals, patients per paramedic ranged between 111 and 1597 as shown in **Appendix VI**;
- II. Out of 41 divisional/Sub-Divisional Hospitals test checked, in 14 divisional/Sub-Divisional Hospitals²², patient per paramedical staff ranged between 2290 and 7352. In the remaining 27 hospitals, patients per paramedic ranged between 506 and 1928 as shown in **Appendix VI**;
- III. At CH/WR, there was a shortage of 64 of paramedical staff (35 per cent) against a sanctioned strength of 185. Similarly, at Rail Wheel Plant hospital/Bela (ECR), only two paramedical staff were posted against the sanctioned strength of 14 staff;

²¹ CH/Byculla/ CR, CH / Gorakhpur/NER, CH / Bilaspur / SECR, CH/Hubli/ SWR and CH/Jabalpur/WCR.

²² DH/Kalyan(CR) , SDH/Samastipur(ECR), DH/Lumding (NEFR), DH/BNZ, SDH/GD(NER), DH/Moradabad, DH, Lucknow, SDH/, Amritsar (NR), DH/SDHs, (NWR), DH/BZA, DH/ Raipur (SECR), DH/ Kota & SDH/NKJ (WCR), DH/ Pratapnagar and, Ratlam (WR).

- IV. Shortage of paramedic staff and consequent idling of machines was also observed in selected hospitals test checked as mentioned below:
- i. In eight hospitals of four ZR²³ and one hospital at DLW/Varanasi, 39 medical equipment such as ultra-sonography machines, phaco emulsification system for eye operation, physiotherapy equipments etc remained idle for various periods since 2008;
 - ii. In CH/WR, medical equipments valued ₹ 3.20 crore procured for Cardio Vascular Department for coronary bypass surgery remained idle;
 - iii. The Physiotherapy department of Divisional Hospital/Lalgarh (Bikaner)/NWR were closed since July 2012 due to non-availability of physiotherapist. Similarly one Operation Theatre Unit at HU/Ludhiana/NR could not be utilized due to non-availability of doctors and paramedics. Physiotherapy Department at Workshop Hospital/Kanchrapara/ER had been functioning without any physiotherapist.
 - iv. 23 medical equipment procured at a cost of ₹ 3.52 crore in four Central, three Divisional/Sub Divisional Hospitals of four ZRs²⁴ could not be utilized due to various reasons such as delay in recruitment and posting of the essential para medical staff and specialist doctors (WR), shortage of technical staff (NCR and CR) and lack of doctors (MR); (*Appendix VII*)

The shortage of paramedical staff affected the medical services as the equipments in hospitals remained idle.

Railway Board stated (July 2014) that the working of a hospital would not be affected if the vacancy rate is distributed over all categories under paramedical staff. Railway Board further asserted that if all the vacancies existed in one sub category, then it would adversely affect the working of the hospital. The reply of Railway Board did not address the issue of shortage of paramedical staff which had resulted in idling of medical equipments as commented above.

²³ CR, ECoR, NWR and WR.

²⁴WR (₹3.20 crore), NCR (₹0.17 crore), CR (₹0.09 crore) and MR (₹0.06 crore)

3.1.4 Contract Medical Practitioners and Honorary Visiting Specialists/Consultants

Contract Medical Practitioners (CMPs) are engaged on a consolidated pay against the vacancies in the sanctioned strength of doctors with the approval of General Manager and renewed every year for a maximum period of eight years. During 2008-13, an expenditure of ₹ 72.91 crore was incurred towards engagement of CMPs. In addition, Honorary Visiting Specialists²⁵ and Visiting Consultants²⁶ are also engaged for specialized medical services to patients. During 2008-13, ₹18.68 crore was incurred for hiring of Honorary Visiting Specialists/Consultants.

Scrutiny of records in selected hospitals revealed the following:

- i. While vacancies in doctors' cadre increased from 364 to 503 during 2008-13, the engagement of CMPs increased from 367 to 541 during the same period;
- ii. In 10 ZRs²⁷, Contract Medical Practitioners were posted with independent charge holding imprest for purchase of medicines etc. Railway Board stated (July 2014) that CMPs exercised financial powers in exigencies for which counter signature of regular IRMS doctors posted at adjacent stations was taken. Contention of the Railway Board was not acceptable as the practice was in violation of Railway Board's instructions that no administrative and financial powers were to be exercised by CMPs;
- iii. Excess operation of CMPs in two hospitals (DH/SBC and MYS) resulted in irregular and unsanctioned expenditure of ₹ 23 lakh; and
- iv. In SWR, the expenditure incurred on engagement of consultants exceeded the ceiling of ₹ 10 lakh per year and as a result, an additional expenditure of ₹ 81.20 lakh was incurred during 2008-13.

²⁵ Engaged on an average of two hours per day with a monthly honorarium ranging from ₹ 7000 to ₹21,000 depending upon the number of days of visit to hospital.

²⁶ Engaged on payment of consultancy fees on case to case basis

²⁷ ER, ECOR, NCR, NR, NER, NEFR, SWR, SCR, SR and WR

Railway Board stated (July 2014) that all the ZRs were being advised to ensure that the expenditure on this account remained within the prescribed limit. Railway Board also stated that a proposal had been initiated to increase the overall limit of each ZR. However, the fact remained that despite having incurred an expenditure of ₹ 91.59 crore during 2008-13 towards engagement of CMPs and hiring of Honorary Visiting Specialists / Consultants, ₹ 1146 crore was incurred during 2008-13 for treatment of railway patients in non-railway hospitals. Moreover, medical and health services were also affected partially as medical equipments were idle due to non-availability of skilled professionals.

3.1.5 Training

Indian Railways Medical Manual provides for periodical professional training to Railway Medical Officers (RMOs). Non gazetted Medical Personnel are also required to undergo certain specialised courses of study in non-railway institutions where found necessary as per the requirement of their work and to upgrade their knowledge and skill of RMOs on regular basis in order to keep pace with the technology development. All ZRs should prepare a yearly perspective plan for training of different category of staff as per modules.

Scrutiny of records of selected hospitals revealed that yearly perspective plan for training was not prepared by medical department in six Central Hospitals, 15 Divisional/Sub Divisional Hospitals, one Workshop Hospital and 28 Health Units of six ZRs²⁸ and in four Production Units hospital²⁹. In four ZR³⁰, 391 doctors attended various training programmes during 2008-13. Records relating to training of Doctors in remaining 13 ZRs were not available. *(Appendix VII)*

Railway Board stated (July 2014) that during 2011-13, 598 medical officers attended training at National Academy of Indian Railways. Railway Board also stated that at times it was not possible to spare doctors due to their shortage. The fact, however, remained that the need for updation of knowledge and skill of the doctors and paramedical staff cannot be ignored.

²⁸ CR, ECR, NR, SER, SCR and MR

²⁹ CLW/Chittaranjan, DLW/Varanasi, DMW/Patiala, and RCF/Kapurthala

³⁰ ER (142), WCR(195), SR(16) and NCR(38)

Imparting of training to medical professionals at National Academy of Indian Railways, Vadodara cannot serve the purpose of training needs as provided for in the manual regarding specialised courses of study in non-railway institutions as per the requirement of their work and to upgrade the knowledge and skill of RMOs.

Chapter 4 → Material Management

Audit objective 3

To see whether there was a mechanism in place for ensuring economy and efficiency in procurement of medicines, its storage, procurement of medical equipments and physical verification

The requirement of medicines is assessed on the basis of actual consumption during the past periods and adequate stocks should be maintained to ensure smooth supply of good quality medicines to the beneficiaries. Procurement of medicines at the railway hospitals is made through centralized procurement by Chief Medical Director's (CMD) office at the Zonal Headquarter in addition to local purchases at the Hospital / Health Units level. As per the revised system of procurement of drugs and medical stores which came into effect from September 2008, essential and vital drugs are procured through Single Tenders or Limited Tenders and the desirable items can be procured through normal Limited Tenders. CMDs of Zonal Railways (ZRs) can purchase vital and essential drugs on single tender basis up to ₹ 5 lakh in each case.

This chapter highlights the procedures followed in procurement of medicines and disposal of surplus stock, availability of drug storage facilities, adequacy in drug analysis and stock verification, delay in procurement and functioning of medical equipment.

4.1 Procurement of medicines

4.1.1 Registration of vendors

As per Railway Board's guidelines (June 2008) on vendor registration, the registration of the drug manufacturing firms is to be processed by the respective CMDs of the ZR in whose jurisdiction the manufacturing plant is

located. The firms should submit documents such as Certificates of Good Manufacturing Practice (GMP), certificates as per the standards laid down by World Health Organization or ISO 9000 certificates etc. CMD of the Zonal Railway is the authority for accepting the registration of firms for supply of medicines to hospitals. However, approval of Director General / Railway Health Services is required for the first time registration. The validity of registration will be for two years. The renewal of registration should be done for every three years after original registration. Firms which have already been registered in some zones can be allowed to get registered in other zones. The registration of a firm should be specific and not applicable to other branches or offices of the firm. Registration is to be made product wise based on the turnover³¹ of the firms.

A test check of records relating to registration of vendors revealed the following deficiencies:

- I. In CLW/Chittaranjan, turnover of the companies seeking registration was not verified. Sanctioned list of products, authentic documents in respect of turnover of the firm as well as undertaking obtained from the firm were also not available;
- II. In ECR, one firm³² was registered on the ground that the same firm was in the list of NR. But the address given in the registration certificate of ECR differed with that of the registration certificate of NR;
- III. A test check in SCR revealed that the Railway administration registered a firm³³ on the basis of its registration in NCR. The firm was registered for 25 drug products in NCR in whose jurisdiction the manufacturing unit was inspected whereas the same firm was registered in SCR for supply of 37 drug products. This implied that the firm was registered for additional 12 drug products which were not

³¹ *If the turnover of the company is ₹ 50 crore to ₹ 150 crore – maximum up to 25 products, ₹ 151 crore to ₹ 500 crore – maximum up to 50 products, ₹ 501 crore to ₹ 1000 crore – maximum up to 75 products and more than ₹ 1000 crore – all products*

³² *M/s Albert David Pvt. Ltd. Kolkata*

³³ *M/s Unijules Life Sciences Limited*

approved by NCR Administration and in contravention of the instruction that registration is to be product-wise;

- IV. In NFR, Medical Department did not ensure the fulfilment of mandatory conditions for renewal of registration such as validity of import licence, Certificate of Good Manufacturing Practice etc. from the supplying firms;
- V. In spite of short supply³⁴ of medicines, no action was taken by SWR against the defaulted firms. Instead, purchase orders were issued to the defaulting firms;
- VI. A manufacturing unit³⁵ registered with NWR was not inspected in spite of the fact that it was situated in its jurisdiction; and
- VII. As per Indian Railway Pharmacopoeia, registration of a firm by one particular zone will not automatically entitle its registration in other zones also as the firm may not have the capacity to supply the material to other zones. Registration of firms with the ZRs is, therefore, necessary for supply of medicines to the concerned ZRs. In SECR and MR/Kolkata, audit observed that medicines were procured from firms which were not registered in their respective ZRs.

Thus, the procedures laid down by the Railway Board for registration of vendors were not followed by the above Zonal Railways.

4.1.2 Centralised Procurement

As per extant instructions³⁶, indents for medicines should be prepared by all Divisional/Central/Controlling Hospitals for submitting to the respective controlling officer who in turn will consolidate them for onward transmission to the CMD's office by 31st January of each year. CMD's office invites tenders giving a minimum of 45 days for response.

³⁴ 68.87 per cent in 2008-09, 87.16 per cent in 2010-11 and 32.81 per cent in 2012-13

³⁵ M/s Ahlcon Parenterals (India) Ltd. Bhiwadi of Dr. Reddy's laboratory.

³⁶ Para 5.4 and 7.2 of guidelines of Indian Railway Pharmacopoeia. and Railway Board's Letter No 2006/H/4/1 dated 19/06/2008

Scrutiny of records of selected hospitals relating to procurement of medicines revealed the following:

- I. In Indian Railways, there is no uniform list of Proprietary Article Certificate (PAC) items³⁷. Medicines procured on Single Tender basis under PAC category varied across ZRs. Test check in SCR revealed that four drugs procured under PAC category were manufactured by other companies also. Procurement of these items under PAC category resulted in extra expenditure of ₹ 30 lakh during 2008-12;
(Appendix VIII)
- II. In three Central Hospitals and five Divisional Hospitals of four ZRs³⁸ and one PU (DLW/Varanasi), correct assessment of the required quantity of medicines was not made resulting in expiry of shelf life of medicines worth ₹ 24.18 lakh which could not be utilized during 2008-13. Medicines valued at ₹ 7.57 lakh were declared surplus in two ZRs³⁹. In DLW/Varanasi, 23 out of 66 cases taken as sample study, the indents were made after full exhaustion of stock and in 12 out of 66 cases excess quantity of medicines were indented though there were sufficient balances in the stocks. The variable approaches adopted by the medical department indicated lack of efficient inventory management;
(Appendix IX)
- III. Delay in placing of the indents was noticed in five ZRs and two PUs⁴⁰. For instance, in NR the average delay was four to five months. In SWR, the delay ranged from 8 to 12 and 10 to 15 months in respect of Central Hospital /Hubli and Divisional Hospital/Bangalore respectively;
- IV. Delay in finalization of tenders by the CMDs of six ZRs and two PUs⁴¹ was noticed. For instance, the Purchase Orders of 2011-12 were

³⁷ *Proprietary articles are the articles for which some persons/firms have exclusive right to manufacture or sale*

³⁸ *ER, ECR, SWR and ECoR*

³⁹ *In ER 1, 07,405 tablets, 7,531 injections, 4,250 Phyle, 50 path (valuing ₹6.90 lakh) and in WCR 21 medicines worth ₹ 0.67 lakh were declared surplus.*

⁴⁰ *ECR, ER, NCR, NR, SWR, CLW/Chittaranjan and DLW/Varanasi*

⁴¹ *ECoR, ECR, ER, NFR, NWR, SWR, CLW and DLW*

issued in 2012-13 and the Purchase Orders of 2012-13 were issued in 2013-14. In CLW/ Chittaranjan, 51 out of 60 cases, Purchase Orders were placed after lapse of 4 to 11 months from the date of indenting. In NWR, the time lapsed between tender opening date and date of issue of supply order ranged up to 170 days (2008-09). Out of 375 cases test checked in NWR, 42 tenders were not finalised within 90 days after opening of tender;

- V. In seven hospitals of four ZRs and one PU⁴², there was delay in supply of medicines. In nine out of 60 cases in CLW/Chittaranjan, medicines were received by the hospital authority beyond the due date of delivery and up to eight months after issue of Purchase Orders;

(Appendix IX)

- VI. As per Railway Board's instructions (June 2008), Limited Tender Enquiries may be issued to a minimum number of three firms against each tender for transparency in tendering process for procurement of medicines. In violation of Railway Board's instructions, limited tender enquiries were issued to two firms in DLW/Varanasi and CLW/Chittaranjan. Test check in hospitals of two Production Units (DLW/Varanasi and CLW/Chittaranjan) also revealed deficiencies in transparency of tender process as mentioned below:

- i. In 19 cases⁴³ of two PUs (CLW-3 and DLW-16), lowest tenderers were ignored without adequate justification and in one case at CLW/ Chittaranjan, purchase order was issued to an unregistered firm⁴⁴; and
- ii. In DLW/Varanasi, M/s Robin Agency, Varanasi offered bid on behalf of M/s Novo-Nordisk Pvt. Ltd., Bangalore by submitting forged documents⁴⁵. Though the matter was detected by DLW Administration in August 2012, no action was taken against the firm. On the other hand, Purchase Orders were repeatedly

⁴² ECoR, ER, NR, NWR and CLW/Chittaranjan

⁴³ Total value of tender was ₹13.08 lakh (CLW- ₹ 3.39 lakh and DLW- ₹ 9.69 lakh)

⁴⁴ Purchase Order No.09/2011/9248/91731 dated 28/09/2011

⁴⁵ PO No. 12275084 dated 11-10-2012

issued (October 2012 and November 2012) to the same firm for supply of medicines. The Railway Administration stated that taking any action against a regular supplier of medicines would create hindrance in a day to day working. The contention of the Railway Administration is not acceptable as encouraging such irregular practice violated the prescribed procedure of registration and the Railway Administration should have ensured legitimacy of the firm's registration before obtaining supply of medicine as the firm was not an authorized distributor of M/s Novo-Nordisk Pvt. Ltd., Bangalore;

Railway Board stated (July 2014) that in view of e-procurement being made compulsory, most of the points raised by audit would be taken care of. The reply of the Railway Board was, however, silent on the issues such as uniformity of PAC items, timely placing of indent and correct assessment of stores which cannot be streamlined through the implementation of e-procurement system.

Thus, centralized procurement was delayed due to incorrect assessment of the quantities, delay in finalization of tenders, delay in issue of purchase orders and supply by the firms. This had contributed to the increase in local purchase of medicines by ₹29.19 crore⁴⁶ in 2012-13 when compared to 2008-09 as commented in the succeeding paragraph.

4.1.3 Local Purchase

Hospitals and Health Units of Indian Railways (IR) also procure medicines and surgical items under de-centralized procurement if the items were not included in the Annual Medical Indent or due to introduction of new item/technology, very low value of the item⁴⁷, local requirements on emergency

⁴⁶ *The expenditure on local purchase during 2013 increased by 66 per cent in comparison to the expenditure incurred during 2008*

⁴⁷ *less than ₹20,000 for the entire zone*

etc. Specific justification⁴⁸ is required in case of local purchases (LP) and purchases through cash imprest in excess of 15 *per cent* of the total budget allotment.

Each medical store should maintain a Day Book of receipts of medical stores to record the date of submitting the bill to the store, the date of passing the bill, date of sending it to the respective Accounts Office, the date on which Accounts Office passed the bill and prepared the cheque for payment. The Medical Officer in charge of administration should monitor the same regularly⁴⁹.

Scrutiny of records of selected hospitals revealed the following:

- I. The expenditure for local purchase of medicines is maintained in Central Hospitals and Divisional Medical Stores of ZRs. The expenditure towards local purchase as well as centralized procurement is, however, booked to the single head of account⁵⁰ by the associate accounts department. In absence of separate heads of account, expenditure towards Central Purchase (CP) and LP could not be monitored effectively by the CMDs of the Zonal Railways and also by the respective Accounts Department; and
- II. During 2008-13, local purchase exceeded the prescribed limit of 15 *per cent* in all the years in eight ZRs⁵¹. The maximum variations of expenditure on LP beyond 15 *per cent* ranged between 62 and 170 *per cent* in five ZRs⁵². *(Appendix X)*

Thus, in absence of separate booking of expenditure for CP and LP, there was lack of effective monitoring of the expenditure incurred towards local purchase resulting in the expenditure towards local purchase exceeding beyond the permissible limit of 15 *per cent* as commented above.

⁴⁸ *Railway Board's letter no 2006/H/4/1 dated 19/06/2008 and Guidelines of Indian Railways Pharmacopoeia*

⁴⁹ *Para 19.1 of Indian Railway Pharmacopoeia 2000*

⁵⁰ *Head of Account 11-231-28*

⁵¹ *CR, NCR, NER, NR, SWR, WCR, WR and MR.*

⁵² *NER, NCR, NWR, SECR and SWR*

Railway Board stated (July 2014) that Medical Department had no objection in creating separate heads for booking of expenditure towards Central Purchase and Local Purchase to ensure better monitoring of the expenditure. The reply of Railway Board, however, did not address the reasons for exceeding the prescribed limit of 15 *per cent* of the budget allotment towards local purchase.

4.2 Storage of Drug

Efficacy and potency of medicines is lost if they are not stored properly as per the labeled storage conditions such as humidity, temperature and light etc. Proper rack facilities should be available to store the drugs in such a way that the drugs nearing expiry should be kept for issue on First in First out (FIFO) basis.

Proper storage facilities such as racks for storage of medicines, labeling of drugs, separate designated area for expired/ rejected drugs etc. were not available in various hospitals across Zonal Railways as indicated below:

- I. Lack of space in seven selected hospitals/Health Units over three⁵³ ZRs;
- II. Lack of proper storage conditions like temperature control etc. in 21 selected hospitals/Health Units over eight ZRs⁵⁴ and in two hospitals of two PUs (CLW/Chittaranjan and RCF / Kapurthala);
- III. Seepage from roofs and walls in five selected hospitals/Health Units in five ZRs⁵⁵ *(Appendix IX)*
- IV. In Central Hospital, Lallaguda (SCR), the observations of Drug Inspector (September 2010) of Central Drugs Standards Control Organisation, Andhra Pradesh regarding maintenance of the required temperature, sufficient racks for storage, labeling of drugs, separate designated area for expired/rejected drugs and use of pellets for storage of drugs were not complied with (July 2014); and

⁵³ SCR, SER and SECR

⁵⁴ ECoR, NCR, NWR, SCR, SWR, SER, WCR and WR

⁵⁵ CR, ECoR, NER, WCR and WR.

- V. In WR, the Fire Department of Greater Mumbai observed (May 2012) that the medical store of Jagjivan Ram Hospital was not safe as it was located in the basement. No action was taken by the hospital authority in this regard (July 2014). In CR, medicines costing ₹0.75 crore were destroyed due to fire on 24 September 2009 in AC drug store room. Investigation revealed that the fire occurred due to defective air conditioner and improper storage of combustible x-ray films.

Railway Board stated (July 2014) that the Zonal Railways would be instructed to follow the audit recommendations in a phased manner.

Thus, adequate infrastructure for storage and preservation of drugs was not available in hospitals across ZRs. Effectiveness of the medicines provided to the patients in absence of proper storage facilities could not be ensured by the Medical Authorities.

4.3 Stock Verification

Periodical stock verification is necessary to assess whether the balance of an item shown in the ledger agrees with the actual physical stock balance. Indian Railway Medical Manual⁵⁶ (IRMM) provides that the Divisional Medical Officer in charge of stores will periodically tally balances in the register with actual stock on hand. The differences, if any, should be reported to the Chief Medical Superintendent (CMS) or Medical Superintendent (MS) of the division for necessary action. CMS/MS should do a random check of items of this register during his inspection. Such departmental stock verification is in addition to the stock verification conducted by Accounts Department once in two years.

Scrutiny of records relating to stock verification of selected hospitals and Health Units revealed the following:

- I. Since no periodicity was prescribed in the IRMM, departmental stock verification was not conducted in 35 hospitals/Health Units in eight

⁵⁶ *Item 7 of Para 407 of Indian Railway Medical Manual Vol. I*

ZRs⁵⁷ and four PUs⁵⁸. In WR, departmental stock verification was, however, conducted partially; *(Appendix IX)*

II. Shortfall in the prescribed frequency of stock verification required to be carried out by the Accounts Department was noticed in seven⁵⁹ ZRs:

- i. In SR, stock verification was done once in five years;
- ii. In CR, stock verification was not conducted at HU/Ghorpuri and at HU/Nasik Road during 2008-13 and 2009-10 respectively;
- iii. In HU/Naihati (ER), stock verification was not done during 2008-13;
- iv. In SER, stock verification for both Part II and Part III items was conducted 179 times (44 *per cent*) as against 405 times during 2008-13;
- v. In SWR, stock verification was done twice instead of thrice; during the year 2008-09, 2010-11 and 2012-13;
- vi. In Sub-Divisional Hospital/New Katni Junction (WCR), four Departmental and two Accounts stock verification were not conducted. In Divisional Hospital/Kota/WCR, no stock verification was carried out during the year 2008-09.

Thus, there was no effective monitoring system in place to ensure periodic Departmental stock verification and also shortfall in Accounts verification. Besides, there were no instructions in IRMM in respect of periodicity and quantum of departmental verification to be done.

4.4 Surplus Stock

As per Para 412 of Indian Railways Medical Manual, when any article is approaching the date of expiry and is surplus to the requirements, it is to be seen whether these can be utilized at other hospitals or Health Units in the division or in some other division of the same zone or other zone. If the medicines still remain unused, they should be destroyed after obtaining the CMD's sanction. As per revised system (June 2008) of procurement,

⁵⁷ CR, ER, NFR, SER, SR, SWR, WCR and MR.

⁵⁸ CLW/Chittaranjan, DLW/Varanasi, RCF/Kapurthala and RWF/Yelehanka

⁵⁹ CR, ER, NCR, SER, SR, SWR, and WCR

medicines purchased should have more than 80 *per cent* shelf life as on the date of delivery.

Scrutiny of records of selected hospitals relating to disposal of surplus medicines revealed that:

- I. In eight hospitals over five ZRs⁶⁰, shelf life of medicines worth ₹ 24.18 lakh expired and they could not be utilized during 2008-13; *(Appendix IX)*
- II. Procurement of medicines having less than 80 *per cent* shelf life resulted in loss of ₹ 4.27 lakhs in CH/NEFR during 2008-13 as the medicines could not be utilized before expiry of their shelf life;
- III. There was no system in place to identify and transfer the surplus drugs in MR/Kolkata and two Production Units (CLW/Chittaranjan and DLW/Varanasi); and
- IV. In SER and MR/Kolkata, express clause for replacement of sub-standard/short shelf life medicines was not incorporated in the Purchase Orders.

Thus, the system of disposal of surplus medicines was not followed effectively leading to non-utilisation of medicines due to expiry of the medicines valuing ₹ 28.45 lakh in five Zonal Railways.

4.5 Drug Analysis

As per Indian Railway Pharmacopoeia, five *per cent* of the items/medicines formulations are to be sent for analysis to laboratories. To ensure group wise distribution of analysis procedure within the five *per cent*, CMDs can decide to distribute group-wise allocation of items to Headquarters hospitals and Divisional Hospitals to avoid duplication of efforts. As per the revised system of Procurement of Drugs (June 2008), each zone should have a panel of good laboratories both Government and private for regular testing. The unfit batch should be replaced completely by the firm irrespective of whether it has been

⁶⁰ CR, ER, WR, NEFR, and NER

used or not. The unfit reports found in the Zonal Railways should be made available on railnet⁶¹ for information to other zones.

Scrutiny of the records of selected hospitals relating to drug analysis revealed the following:

- I. Shortfall in drug analysis was noticed in 21 hospitals/Health Units in nine ZRs and RWF/Yelahenka during 2008-09, 18 hospitals/Health Units in seven ZRs and RWF/Yelahenka during 2009-10, in 12 hospitals/Health Units in five ZRs and RWF/Yelahenka during 2010-11, nine hospitals in five ZRs and RWF during 2011-12, 11 hospitals in five ZRs and RWF during 2012-13⁶². Shortfall in sample testing is indicated in the table below: *(Appendix IX)*

Table 2: Shortfall in sample testing in selected hospitals across Zonal Railways

Year	Samples due for testing	Samples sent for testing	Shortage	Percentage of shortage
2008-09	967	629	338	34.95
2009-10	896	731	165	18.42
2010-11	780	544	236	30.26
2011-12	744	593	151	20.30
2012-13	837	646	191	22.82

- II. A test check of selected hospitals of SCR revealed that drugs were not sent for analysis as there was no contract with any firm during the period 10 April 2010 to 31 May 2011. In three cases of local purchase, drugs were consumed by the time the report of substandard quality was received from the testing laboratories. No penal action was taken by the CMD of SCR as these medicines were procured from agencies who were not authorized by the drug manufacturing company;

⁶¹ *Intranet created for the Administrative and Organizational information needs of Indian Railways*

⁶² *2008-09 – CR, ECoR, NFR, NER, NR, NWR, SCR, SECR and MR.*

2009-10 – CR, ECoR, NFR, NER, NR, NWR, SCR and RWF/Yelahanka.

2010-11 – NFR, NER, NR, NWR, SCR and RWF.

2011-12 – ECoR, NFR, NER, NR, NWR and RWF.

2012-13 – CR, NFR, NER, NR, NWR and RWF.

- III. In 20 Hospitals/Health Units over eight ZRs⁶³, substandard drugs worth ₹ 21.45 lakh were supplied. Of them, in six Hospitals/Health Units over four ZRs⁶⁴, drugs were given to the patients before receipt of the test results. Particularly in MR/Kolkata, 93.8 *per cent* of drugs were consumed before the receipt of test results. In the cases where the substandard drugs were noticed, replacement details were not available on record. The unfit reports were also not made available on rail net for information to other zones; and *(Appendix IX)*
- IV. In MR/Kolkata, there was considerable delay of seven months in sending drugs for analysis. The delay in receipt of test reports ranged between 91 days to 1119 days in WR⁶⁵.

Thus, the existing system of ensuring sample testing and replacement of substandard drugs was not adequately effective. Zonal Railways failed in initiating action against the firms supplying substandard drugs and also against the officials responsible for violating the extant instructions in regard to drug analysis. Further, delayed receipt of reports of drug analysis defeated its objective of providing quality drugs to patients.

4.6 Procurement of Medical Equipment

Medical Equipment refers to all the plant and equipment, devices ranging from simple thermometer to sophisticated and costly diagnostic imaging equipment that are required in hospitals for better and effective treatment of various ailments. Scrutiny of records relating to procurement of medical equipment in selected hospitals revealed the following:

- I. There is no yardstick for provision of medical equipment in hospitals of different types over IR;
- II. 90 equipments each costing more than ₹ 15 lakh sanctioned during 2008-13 with an estimated cost of ₹ 32.72 crore were not procured in

⁶³ SECR, NWR, ECoR, ER, WR, NEFR, NER and WCR

⁶⁴ ER, ECoR, SER and WR.

⁶⁵ In 66 cases it exceeded 300 days, in 27 cases it exceeded 400 days and in 52 cases the reports were not received at all.

25 hospitals over 14 ZRs⁶⁶. Similarly, 144 equipments each costing less than ₹ 15 lakh which were sanctioned during 2008-13 with an estimated cost of ₹ 7.97 crore were not procured in 18 hospitals/Health Units over eight ZRs⁶⁷ and two Production Units (DLW/Varanasi and RCF/Kapurthala); *(Appendix IX)*

- III. 56 medical equipments procured at a cost of ₹ 20.73 crore in 11 hospitals over nine ZRs and in two Production Units hospitals⁶⁸ were either not in working condition or commissioned belatedly. The delay in commissioning the medical equipment was up to 891 days; *(Appendix IX)*
- IV. Medical equipments worth ₹ 6.27 crore were procured between March 2007 and October 2010 for use in new Railway Hospital at Perambur (SR). The hospital was, however, commissioned in June 2013. Due to delay in commissioning of the hospital, the equipments remained idle during the intervening period;
- V. At CH/WR, Ventilator Universal for Adult and Pediatric-Neonatal patients procured in January 2010 at a cost of ₹ 62.40 lakh was commissioned belatedly in June 2012. The equipment remained unutilized for 28 months out of 60 months of its codal life; and
- VI. 11 equipment each costing more than ₹ 15 lakh, which were rendered surplus in two ZRs (CR – 9, SCR – 2) between 2004 and 2012, were not disposed of (March 2013). Similarly, at LLR Hospital/RCF, six types of eye related medical equipment remained unutilized since August 2012 due to non-availability of Eye Surgeon and were being transferred to Sub-Divisional Hospital, Amritsar (March 2013).

Thus, delay in procurement/commissioning and non-availability of specialists/technical staff resulted in idling of the medical equipments and loss of valuable life of the assets.

⁶⁶ CR- 3, ECoR- 2, ER- 7, NCR-5, NER-3, NFR-5, NR-8, SCR-3, SECR-3, SER-19, SR-22, SWR-5, WR-1 and MR/Kolkata – 4.

⁶⁷ ECR- 3, ER- 28, NCR-31, NER-10, NWR-5, SECR-4, SER-18, MR-40, DLW-2 and RCF – 3.

⁶⁸ ECoR, NCR, NR, NWR, SCR, SECR, SER, SR, WR and 2 PUs hospitals at CLW and DLW

4.6.1 Downtime of Equipment

Down time of the equipment refers to the time that a system fails to provide or perform its primary functions. As per IRMM, History Cards and Log Books are to be maintained in respect of costly equipment. Despite having incurred an expenditure of ₹ 57 crore during 2008-13 towards repair and maintenance, several instances of medical equipments failure were observed which affected an un- interrupted medical services to patients.

Scrutiny of records relating to downtime of medical equipment each costing more than ₹ 15 lakh in 159 selected hospitals and Health Units revealed the following:

- I. Records relating to down time of medical equipment and the expenditure incurred thereon for repairs were maintained in History cards/ Log books in seven hospitals over five ZRs⁶⁹ only;
(Appendix IX)
- II. 10 medical equipments each costing more than ₹ 15 lakh remained out of order for 182 months either due to repairs (65 months) or non-availability of staff (103 months) or non-availability of reagents (14 months) in eight hospitals across eight⁷⁰ ZRs and in hospital at DMW/Patiala;
(Appendix IX)
- III. In SR, one Basic T Bird Ventilator with accessories (₹ 17.42 lakh) originally procured for CH/Perambur (SR) was transferred to Divisional Hospital/Palghat (SR) in December 2010. Since then the equipment was not in working condition;
- IV. Industrial Hospital Laundry System costing ₹ 16.53 lakh procured at for Kasturba Gandhi Hospital (CLW/Chittaranjan) was partially used since July 2011 and remained largely out of order;
- V. In CH/Byculla (CR), one fully automated Random Access Biochemistry Analyzer purchased in May 2008 at a cost of ₹ 54 lakh for pathology department has been out of order since July 2012;

⁶⁹ ECoR, NCR, NER, SR and WCR

⁷⁰ ECoR, ER, NER, NCR, NR, SCR, SER and WR

- VI. 2611 patients from eight hospitals over three ZRs⁷¹ and one Production Units hospital at DMW Patiala, were referred to recognized private hospitals due to failure of the equipment and an expenditure of ₹ 6.57 lakh was incurred for their treatment; and
(Appendix IX)
- VII. Annual Maintenance Contract was not executed for 34 different types of medical equipment received through Machinery & Plant Program in Byculla hospital (CR) despite lapse of warranty period.

Thus, adequate measures were not taken for repairing of equipment on time resulting in reference to non-railway hospitals during the down time of the equipment.

In respect of audit findings mentioned in sub-para 4.1.1, 4.3, 4.4, 4.5 and 4.6, Railway Board stated (July 2014) that audit had reported only sporadic instances. They further asserted that at most of the places laid down instructions were being followed meticulously. Contention of the Railway Board was not acceptable as in a test check of 64 hospitals, Audit observed that there were instances of non-procurement of 235 medical equipment, belated commissioning/out of service of 56 medical equipment and non-utilization of costly equipment for substantial period which cannot be construed as sporadic instances. Moreover, due to non-maintenance/partial maintenance of History cards and Log books of high value medical equipment in 12 ZRs, the status of functioning of equipments could not be verified. Had the extant procedure/instructions been followed by the Medical Department, the deficiencies would not have occurred. Railway Board has not put in place any monitoring mechanism and thus failed in enforcing compliance of its instructions and provisions of the manual by the hospitals across Zonal Railways.

⁷¹ ER, NCR and NER

Chapter 5 → Hospital Administration

Audit Objective 4

To see whether the hospital administration including maintenance of data on patient care, treatment facilities and waste management was efficient.

Sound administration is the key in achieving goals of an organization. Hospital Administration is concerned with planning, organizing, staffing, coordinating, controlling and evaluating health services for the community to provide maximum patient care of superior quality at low cost.

This chapter, inter alia, highlights the status of implementation of Hospital Management Information System, documentation of medical records of patients, availability of treatment facilities, implementation of National Health Programmes, waste management etc.

5.1 Hospital Management Information System

Hospital Management Information System (HMIS) was conceived to keep records of the Medical History of patients at the Hospitals. The objectives of implementation of HMIS were to cover patient registration, issue of sick certificates, test reports of pathology, accountal / availability of medicines in pharmacy/medical store, scheduling of doctors / nurses, reports of periodical medical examination, operation theatre scheduling, patient billing etc. in addition to reduction of waiting time for patients at hospitals.

The work of development and implementation of HMIS across Indian Railways was entrusted to SER in 1992-93 with a sanction of ₹ 25 lakh for procurement of hardware, software, data based licenses and other infrastructure. In 1996 and 2004, an amount of ₹ 12 lakh and ₹ 10 lakh respectively was sanctioned for upgradation of the system and procurement of

hardware and software. However, only 3 modules relating to patient registration and radiology out of planned 13 modules started functioning from 2002 and the position remained same till September 2013.

Subsequently in 2005-06, Railway Board entrusted the project to WR for development and implementation in co-ordination with Centre for Railway Information System (CRIS). A provision of ₹ 1.5 crore was made in Pink Book of 2006-07 towards implementation of HMIS with a project cost of ₹ 2.98 crore. The Memorandum of Understanding (MoU) to be signed in June 2007 was delayed because of the dispute regarding usage of network of FOIS or RAILNET and the same was signed in January 2011. The revised estimate of ₹ 2.62 crore sent by CRIS in September 2012 was found not justifiable by WR and the matter was referred to Railway Board in April 2013. A committee of Executive Directors at Railway Board level was formed in December 2013 to suggest a suitable HMIS for adoption by all the ZRs. No further development took place till July 2014.

Scrutiny of records relating to the status of the implementation of HMIS in selected hospitals revealed that even after a lapse of over two decades since initiation of the project, only three modules were implemented (July 2014) after incurring expenditure of ₹ 66 lakh. Some local applications were, however, developed and operational in seven hospitals in six ZRs⁷² and hospital at RCF/Kapurthala. *(Appendix XI)*

Railway Board stated (July 2014) that a proposal had been initiated by Health Directorate to install HMIS in all hospitals of Indian Railways. However, the fact remained that there was lack of adequate initiative at the Railway Board level in implementing HMIS across Zonal Railways and no time bound action plan was also drawn to expedite its implementation.

5.2 Documentation

Documentation of the beneficiary's identity and patient's health records ensures delivery of better health care at optimal cost. It promotes accurate,

⁷² NR, SCR, ECR, NER, SECR and ER

clear, complete patients diagnosis, treatment and progress leading to delivery of quality health care.

5.2.1 Beneficiary data

Periodical updating of beneficiary data is necessary for budgeting, manpower planning and infrastructure development of the hospitals.

Scrutiny of the records relating to maintenance of beneficiary data in selected hospitals revealed that the method of calculating the number of beneficiaries was not uniform across ZRs. The quantum of beneficiaries was calculated by multiplying the number of serving employees of the respective jurisdiction with a factor of four or five as the number of family members and for retired employees the multiplying factor was two or three. No rationale for adopting the variable approaches to ascertain the actual number of beneficiaries could be traced from the records of the Railway Administration. Periodical updating of beneficiary data was not carried in any hospital/health unit. The number of beneficiaries was almost same at 60 lakhs in IR during the period 2008-12. The number of beneficiaries, however, increased to 62.74 lakhs during 2012-13.

Railway Board stated (July 2014) that regular audit of in-patient and out-patient were being undertaken at divisional and hospital-in-charge level. The reply of the Railway Board was not acceptable as the data related to patients were not considered for planning infrastructure development, manpower requirement etc. Moreover, the maintenance of data for the number of patients treated cannot suffice the need of comprehensive data of actual number of beneficiaries as it acts as an effective tool for formulation of budget for the medical department. The reply of the Railway Board did not address the basis of the calculation of the number of beneficiaries and their periodical updating.

5.2.2 Medical Identity Cards

Para 626 of Indian Railway Medical Manual (IRMM) provides that Identity Cards are necessary for availing of medical facilities at Railway Hospitals.

The employees are issued Medical Identity Card (MIC) either by the Personnel Department or by the concerned departments of the employee. Identity Cards are registered with the Railway Hospital by recording the details of the beneficiaries in Medical Identity Card Register.

Scrutiny of records relating to issue and registration of MICs revealed the following:

- I. Medical Identity Cards were not periodically updated in 11 hospitals and 10 Health Units over three ZRs⁷³ though the practice of obtaining updated family declarations from the employees every five years is in practice for issue of Railway passes; *(Appendix XI)*
- II. In all Zonal Railways (excluding SWR, ECoR, NEFR and WR), Medical Identity Cards do not bear the photographs of all the beneficiaries except that of serving employee himself/herself. The risk of extending railway medical facility to unauthorized persons further increases as the treatment in railway hospitals were also being permitted based on railway passes and pay slippis;
- III. Periodical census of beneficiaries was neither taken up nor was reconciliation done between the number of MICs issued by the department of the employees and those registered with Medical Department.

Railway Board stated (July 2014) that Personnel Department issues Medical Identity Cards which are being utilized by the Medical Department to identify the beneficiaries. In this connection, it is stated Medical department should provide medical facilities to genuine beneficiaries and the same could not be ensured when the medical facilities were provided on the basis of railway passes or pay slippis or Medical Identity Cards that did not bear the photographs of all the beneficiaries as observed in test check.

⁷³ SCR, CR and NWR

5.2.3 Medical History Folders

Maintenance of Medical History Folders (MHFs) of the patients treated in hospitals is considered as a good practice to obtain instant feedback on the past ailments of a person. Apart from helping in better diagnosis, MHFs can be helpful in saving cost of treatment by obviating unnecessary tests and wastage of medicines.

Scrutiny of records relating to maintenance of MHFs in selected hospitals of IR revealed the following:

- I. Medical History Folders were not maintained in 24 hospitals and 40 HUs over seven ZRs⁷⁴ including HUs attached to two PUs⁷⁵; *(Appendix XI)*
- II. In hospitals of DMW/PTA and SCR, MHFs were being maintained manually for in-patients only;
- III. In Central Hospital/NR, MHFs were not maintained for OPD patients except for all chronic patients and RELHS beneficiaries⁷⁶;
- IV. In NCR and SR (except CH/Perambur), MHFs were maintained manually for all chronic patients and RELHS beneficiaries;
- V. Though MHFs were maintained manually in NFR, there was no provision of linking them with subsequent visit or admission of the patient; and
- VI. In SECR, the medical history of the out-patient was maintained in the Medical Card itself and for in-patients; the same was being maintained at the Hospital.

Railway Board stated (July 2014) that all medical records of the patients would be available online after implementation of HMIS. However, the fact remained that even after a lapse of over two decades, HMIS could not be implemented (July 2014).

⁷⁴ CR, SWR, NWR, WCR, SER, WR (except in Divisional Hospitals/ Ratlam) and MR

⁷⁵ CLW/Chittaranjan and DLW/Varanasi

⁷⁶ RELHS refers to Retired Employees Liberalized Health Scheme which includes retired railways employees eligible for railway medical facilities.

Thus, in the absence of MHFs, treatment of indoor and outdoor patients was an independent exercise and the good practice of maintenance of MHFs to provide quality medical services at minimal cost is lost.

5.3 Treatment Facilities

Medical facilities to railway beneficiaries are provided both in railway and in non railway hospitals. 80 *per cent* in secondary level health care and five *per cent* in tertiary level care is provided by the existing railway hospitals. In case of higher secondary and tertiary medical care, railway patients are referred to non railway hospitals.

Bed Occupancy Ratio (BOR)⁷⁷ is a vital parameter to assess the need of infrastructure development of hospital to provide requisite medical facilities to beneficiaries.

Railway Board stated (July 2014) that BOR of a general hospital should be between 70 and 80 *per cent*. A test check in Audit, however, revealed that out of 22 Central Hospitals⁷⁸, BOR ranged between 40 and 46 *per cent* in four hospitals⁷⁹. Similarly, out of 41 Divisional / Sub-Divisional Hospitals test checked, in sixteen⁸⁰ hospitals, BOR ranged between 5 and 48 *per cent*;

5.3.1 Treatment in non railway hospitals

Medical department of Zonal Railways have empanelled some Government and Private hospitals for providing medical care which are not available in their existing hospitals. Railway Board from time to time has laid down guidelines for empanelment of private hospitals. As per extant instructions, the private hospitals are empanelled with the approval of Railway Board initially and renewed for next five years by the concerned General Manager of the Zonal Railways.

⁷⁷ *Cumulative in patient x 100 / No of beds x days*

⁷⁸ *Includes 17 Central Hospitals and five hospitals of PUs*

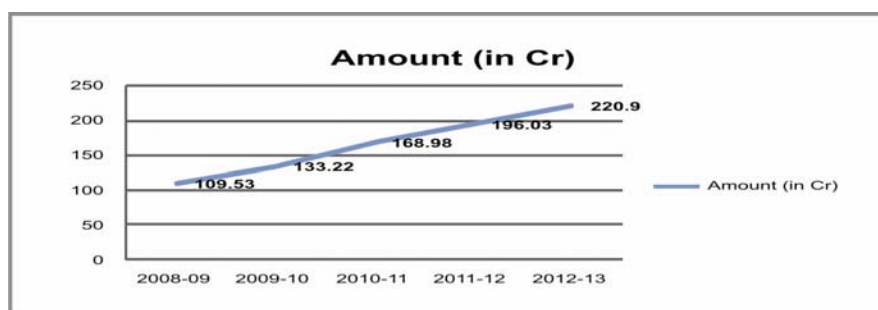
⁷⁹ *ECoR, NCR, CLW/Chittaranjan and RWF/Yelahanka.*

⁸⁰ *Igatpuri and Manmad (CR), Gaya (ECR) KUR (ECoR), Andal (ER), Jalpaiguri, New Tinsukia and Lumding of NEFR, Sahadol and Nainpur of SECR, ADA and BNDM of SER, Palghat, Villupuram and Erode of SR and Itarsi (WCR).*

Scrutiny of records relating to empanelment of hospitals and referring of patients for treatment in recognized non railway hospitals revealed the following:

- I. The referral expenditure⁸¹ in IR during 2008-13 was ₹ 1146 crore for treatment of 2.96 lakh patients in non railway recognized hospitals. The referral expenditure on reimbursement to non railway hospitals had increased from ₹ 170.57 crore during 2008-09 to ₹ 304.16 crore during 2012-13 (78.32 per cent). In eight ZRs⁸², the expenditure exceeded IR average of 13.79 per cent of the total medical budget with the highest being 32.21 per cent in SCR during 2012-13.
- II. The referral expenditure of all selected hospitals of Indian Railways increased from ₹109.53 crore during 2008-09 to ₹ 220.90 crore during 2012-13. The major referral expenditure incurred was ₹ 170 crore at Central Hospital/SCR, ₹ 112 crore at Central Hospital/Byculla (CR), ₹ 98 crore at Central Hospital/New Delhi (NR), ₹ 54 crore at Jagjivan Ram Hospital/Mumbai (WR) and ₹ 32 crore at Central Hospital/Perambur(SR) during 2008-13. The increasing trend of referral expenditure during 2008-13 was as depicted below:

Figure 4: Expenditure towards referral cases from selected hospitals during 2008-13



- III. Though Railway Board's guidelines for empanelment of hospitals were followed, the terms and conditions contained in the MoUs executed with the private hospitals were not uniform. A test check in

⁸¹ Expenditure incurred towards treatment of Railway Beneficiaries at Non-Railway Hospitals

⁸² CR (19 per cent), ECoR (15.26 per cent), NCR (16.44 per cent), NWR (30.97 per cent), SCR (32.21 per cent), SECR (26.84 per cent), SWR (18.51 per cent), WR (15.24 per cent)

SCR revealed that though the clauses such as training of doctors and paramedical staff in the private empanelled hospitals and the lowest tariff charging for railways in comparison with other institutions etc. were available in the MoU executed by the SCR Zonal HQrs., the same were not incorporated in the MoU executed in the divisional level;

- IV. Railway Board in March 2013 had provided various yardsticks for manpower planning of Medical department. The extent of specialty services that should be made available in Central Hospitals and in Divisional Hospitals irrespective of their bed strength and other hospitals with more than 100 bed strength and Sub-Divisional / Workshop Hospitals depending on the bed strength was laid down. A test check of five Divisional Hospitals over five ZRs revealed that there was shortage of three to seven specialty services.

(Appendix XII)

- V. Analysis of the expenditure incurred by the Hospitals in the Zonal Railways revealed the following:
- i. Though an advance cardiac centre was made operational in January 2011 at Central Hospital/ER, patients were referred to private recognized hospitals for cardiac treatment and an expenditure of ₹ 1.77 crore was incurred between February 2011 and March 2013.
 - ii. Central Hospital, Lallaguda (SCR) referred 5330 patients to private hospitals for CT Scan and MRI during 2009-12 and incurred expenditure of ₹ 2.05 crore⁸³. The hospital also referred 245 haemodialysis patients to private hospitals during 2010-13 as the existing facility caters to only 25 patients per annum. This had resulted in extra expenditure of ₹ 8.53 crore as the monthly expenditure per patient was ₹ 40,000 when referred to private hospital whereas the expenditure was only ₹11,000 when the dialysis is conducted at Railway Hospital. Similar instances were

⁸³ CT Scan (3745 patients- ₹1.11 crore) and MRI (1585 patients- ₹0.94 crore) during 2009-12

noticed at Central Hospital/ER where an additional expenditure of ₹ 25 lakh was incurred on referring patients for haemodialysis during 2011-13 as existing three haemodialysis units and other logistics were not adequate to meet the demand.

- iii. In SWR, Audit observed wide variation in rates between Apollo Hospital and St. Johns hospital for identical treatment. The difference in rates was up to 143.4 *per cent*, 1052 *per cent*, 439 *per cent* and 110 *per cent* for cardiology, nephrology, neurosurgery and orthopedics respectively. Despite higher rates, number of patients (4786) referred to Apollo Hospital was more than the patients (1694) referred to St. Johns hospital. During 2008-13, on an average expenditure of ₹ 34 lakh per patient was incurred towards treatment at Apollo Hospital as against the expenditure of ₹ 28 lakh for treatment at St. Johns hospital.

Railway Board stated that small hospitals are not geared up for specialised treatment. In this connection, it is stated that even in Central Hospitals in ER and SCR where requisite facilities were available as mentioned above, patients were referred to recognized private hospitals. Moreover, avoidable financial implication was not given consideration in SWR while referring to private hospitals having identical treatment facilities.

Thus, lack of adequate infrastructure facility resulted in significant increase in expenditure towards treatment at non- railway hospitals.

5.4 Diet Charges

Diet supplied to patients in railway hospitals are charged as per the rates as prescribed from time to time. Indian Railways Medical Manual⁸⁴ provides that the rates of diet charges are required to be fixed by the Zonal Railway on 'No profit No-loss basis'. In addition, 20 *per cent* of the total cost so fixed for basic provisions is to be included to meet the cost of overheads and the rates thus fixed are to be reviewed every three years.

⁸⁴ Para 642 of IRMM of 2000 (Volume - I)

Further, in the event of treatment in recognized private hospitals, the diet charges should be recovered at the rate 20 *per cent*⁸⁵ of the room rent charges in case tariff does not indicate the accommodation and diet charges separately.

Scrutiny of records relating to revision and recovery of diet charges from the patients revealed the following:

- I. Revision of diet charges was not carried out in the stipulated period of three years in nine ZRs⁸⁶ and in two PUs (CLW/Chittaranjan and RCF/Kapurthala). In CLW/Chittaranjan and CR, diet charges were not revised during the period 1999 – 2013 and 1999-2012 respectively;
- II. In seven ZRs and one PU⁸⁷, short recovery of diet charges amounted to ₹ 1.78 crore. Short /non recovery of diet charges from patients in remaining five other ZRs⁸⁸ could not be assessed in Audit due to improper maintenance or non-availability of records;
- III. Recovery of diet charges of ₹ 29 lakh was not made from patients who availed of treatment in private hospitals in five ZRs and four⁸⁹ PUs;
- IV. The approach of the medical department for recovery of diet charges in respect of patients who availed of treatment at Non-Railway Hospitals varied across ZRs as indicated below:
 - i. In 15 hospitals and 15 Health Units over four⁹⁰ ZRs where reimbursement of room rent / bed charges were made at CGHS package rates, no diet charges were recovered as the components of diet charges and bed charges were not identifiable;

(Appendix X)

⁸⁵ 656 of IRMM of 2000 (Volume – I)

⁸⁶ SCR, CR, ECoR, NCR, NER, NWR, SER, SR and WR (except in JRH Hospital and SDH/Valsad)

⁸⁷ CR – ₹0.80 crore, ECoR – ₹0.04 crore, ECR – ₹0.08lakh, NCR – ₹1.06 lakh, SECR – ₹0.07 crore, SR – ₹0.67crore, WR (DH/Ratlam & Workshop/Dahod) – ₹0.09 crore & CLW – ₹0.10 crore

⁸⁸ NEFR, NER, NWR, WCR & WR (JRH Hospital)

⁸⁹ ER – ₹0.05 crore, ECoR – ₹0.07crore, NCR – ₹0.07 crore, CR - ₹0.02 crore, NWR – ₹0.18 lakh, CLW - ₹0.03 crore, DLW - ₹0.03 crore, DMW – ₹0.02 crore & RCF – ₹0.75lakh

⁹⁰ NR, SR, WCR & WR

- ii. In two ZRs⁹¹, MoU executed with the private hospitals did not provide for recovery of diet charges from patients;
 - iii. In RWF/ Yelehanka and in SECR, diet charges were paid directly by the patients treated in private hospitals; and
 - iv. In SER, diet charges were not recovered from the patients treated in private hospitals.
- V. Indian Railways provide diet to patients on 'No profit No loss basis'. As per Railway Board's directives (March 2003), 20 per cent overhead⁹² is to be included to the cost of provisions to arrive at the cost of diet. Scrutiny of records revealed that the expenditure incurred for providing diet to patients⁹³ was more than the amount recovered from them resulting in loss of ₹ 7.80 crore across 14 ZRs and in three PU's⁹⁴ during 2008-13 and *(Appendix XIII)*
- VI. A test check of deployment of kitchen staff in hospitals of Production Units revealed that in LLR Hospital/RCF/Kapurthala, deployment of departmental kitchen staff was not commensurate with their work load. Daily diets supplied were averaging one to three only and for this purpose one master cook, three head cooks besides one dietician were deployed. Taking into account the salaries of the kitchen staff, cost per diet ranged between ₹ 1756 and ₹ 9123 during the years 2008-13.

Thus, the Medical Department of Zonal Railways failed in periodic revision of the diet charges to be recovered from the patients. Railway Board also failed in enforcing compliance to its instructions by the Zonal Railways resulting in short recovery of ₹ 2.07 crore in addition to loss of ₹ 7.80 crore for providing diet to patients.

Railway Board stated (July 2014) that instructions had been issued to the ZRs for revision of diet charges at regular intervals. In this connection, it is stated

⁹¹ SCR & SWR

⁹² *The actual cost of overheads should include salaries of kitchen staff, fuel charges, electric charges and water charges etc.*

⁹³ *which includes cost of free diet and concessional diet*

⁹⁴ *CR, ER, NEFR, NER, NR, SCR, SECR, SER, SR, WCR, NWR, SWR, WR, NCR, CLW/Chittaranjan, DLW/Varanasi & RCF/Kapurthala*

that mere issue of instructions without proper follow up is unlikely to ensure their compliance as it was observed that despite existence of provisions, revision of diet charges was not carried out within the stipulated period of three years in nine ZRs.

5.5 Water Quality

As per Para 911 to 916 of IRMM Vol.II, provision of safe drinking water is the responsibility of Engineering Department. The Medical Department is, however, responsible for monitoring the quality of drinking water. As per extant instructions, Health Inspectors should check the presence of Residual Chlorine at various distribution points randomly and record of the same should be kept.

Scrutiny of records relating to water samples tested for Residual Chlorine, Biological analysis and Chemical analysis in the selected hospitals revealed that 19.33 *per cent* of the samples tested for Residual Chlorine, 10.95 *per cent* of the samples tested for Biological Analysis and 6.19 *per cent* of the samples tested for Chemical Analysis were not found satisfactory as indicated in the table below:

Table 3: Results of water samples tested during 2008-13

Central Hospitals of ZRs including MR and PUs					
Residual Chlorine		Biological Analysis		Chemical Analysis	
No. of samples tested	No. of samples found not satisfactory	No. of samples tested	No. of samples found not satisfactory	No. of samples tested	No. of samples found not satisfactory
346100	68176	25084	2368	721	0
Divisional and Sub-Divisional Hospitals					
861191	154067	71722	8938	1490	123
Health Units					
170325	28315	15075	1428	450	43
Workshop Hospitals					
57971	26945	4559	12	20	0
Total					
1435587	277503	116440	12746	2681	166
<i>19.33 per cent</i>		<i>10.95 per cent</i>		<i>6.19 per cent</i>	

Further scrutiny revealed that:

- I. In Central Hospitals of four ZRs⁹⁵, water samples testing for Residual Chlorine was not done. While in five hospitals and seven HUs over three ZRs⁹⁶ and in hospital at DMW/Patiala, chemical analysis was done partially. However, in 18 hospitals and 15 HUs in six ZRs⁹⁷ and hospital attached to RWF/Yelehanka, chemical analysis was not done during 2008-13.
- II. Chemical analysis was also not done at 30 Divisional /Sub-Divisional Hospitals in 14 ZRs⁹⁸ in different spells of years during 2008-13.
- III. At five hospitals of four ZR⁹⁹, regular Residual Chlorine tests were not conducted in different years. Further, at seven hospitals in four ZRs¹⁰⁰, Bacterial analysis was not conducted in different years of the review period.

Railway Board stated (July 2014) that the percentage of samples found fit for residual chlorine was close to 90 *per cent* during 2010-12. Railway Board further stated that the shortfall in bacteriological testing at some stations was due to vacancies of Health Inspectors. In this connection, Audit observed that 19.33 *per cent* of samples tested for Residual Chlorine and 10.95 *per cent* for Biological Analysis were found unsatisfactory besides, there were instances of not conducting Residual Chlorine test and Chemical analysis in hospitals as commented above.

⁹⁵ ECR (2008-13), SECR (2008-13), WR (2008-09) and MR/Kolkata (2008-09, 2009-10, 2010-11)

⁹⁶ CR (2008-12) ECoR (2009-13), MR (2008-11) and DMW/Patiala (2008-09)

⁹⁷ ECR, NCR, NR, SECR, SER and WR

⁹⁸ DH/Kalyan, SDH/Igatpuri & SDH/Manmad of CR, SDH/Gaya & Polyclinic/Hajipur of ECR, DH/KUR of ECoR, DH/Malda (2008-11 and 2012-13, SDH/Andal and Workshop Hospital/Kanchrapara of ER, DH/Jhansi & SDH/Kanpur of NCR, DH/BNZ & SDH/GD of NER, DH/MB, SDH/Amritsar & DH/LKO of NR, DH/Lalgarh & SDH/BKI of NWR, RH/BZA, DH/RYPs & PC/KZJ of SCR, Raipur and Nagpur of SECR, DH/ADA of SER, DH/Palghat of SR, SDH/NKJ, DH/Kota & SDH/Itarsi of WCR and DH/Pratapnagar, SDH/Valsad and DH/Ratlam of WR

⁹⁹ Polyclinic/Hajipur/ECR (2008-09), SDH/RYPs and Polyclinic/KZJ/ SCR (2008-13), SDH/Itarsi / WCR (2008-13) and DH/Ratlam / WR (2008-11)

¹⁰⁰ Polyclinic/Hajipur/ECR (2008-09 & 2010-12), SDH/RYPs & PC/KZJ (2008-13) of SCR, DH/Pratapnagar (2008-10), DH/Ratlam (2008-10 & 2011-12) & SDH/Valsad (2009-13) of WR and DH/Kota (2011-13) of WCR

Thus, Medical Department of Zonal Railways failed in ensuring provision of quality water to the patients as there were not only instances of unsatisfactory quality of water, there was also shortfall in periodical water quality check. Railway Board also failed in enforcing compliance of the extant instructions in this regard.

5.6 Food Quality

In order to ensure standards of hygiene, the food quality is tested under Prevention of Food Adulteration Act (PFA), 1954 and Prevention of Food Adulteration Rules, 1955 and also under Quality Control (QC) as provided in IRMM. The Act has been replaced with the enactment and notification of the Food Safety and Standards Act (FSSA) 2006 and Food Safety and Standards Rules 2011 with effect from August 5, 2011. Food Safety Officers (FSOs) and Health Inspectors of Medical Department in their area of jurisdiction collect the food samples under PFA Act 1954 / FSSA 2006 and Quality Control respectively and send the same to food laboratories for food quality testing.

Scrutiny of records relating to food quality checks in selected hospitals of IRs revealed that:

- I. 3.28 *per cent* of the food samples collected / tested under PFA / FSSA and 2.87 *per cent* for Quality Control were found adulterated as indicated below:

Table 4: Details of Food Samples tested during 2008-13

Central Hospitals of ZRs including MR and PUs			
No. of food samples collected / tested		No. of food samples found adulterated	
PFA / FSSA	QC	PFA/FSSA	QC
1431	3730	23	142
Divisional and Sub-Divisional Hospitals			
3294	18736	132	503
Total			
4725	22466	155	645
3.28 per cent		2.87 per cent	

- II. In Central Hospitals of 11 ZRs and hospitals attached to five¹⁰¹ PUs, food quality checks under FSSA were not conducted. Quality Control checks were also not done in nine ZRs and four¹⁰² PUs.
- III. Food quality checks under FSSA were not conducted in nine hospitals of five ZRs¹⁰³ and in three hospitals at two ZRs¹⁰⁴, QC checks were not conducted in different years during 2008-13.

Railway Board stated (July 2014) that food samples are lifted by the Food Safety Officers under FSSA and sent to the notified laboratories as samples cannot be analysed in Railway Hospitals. However, the fact remained that the responsibility of maintaining desired standards of hygiene and quality food to patients rests with the Medical Department of Indian Railways which can only be ensured through regular food quality checks.

5.7 Hospital Waste Management

Each hospital should develop a proper system for collection, storage and disposal of hospital waste. Infectious waste should be subjected to incineration. Needles, scalpel, blades and discarded glassware should be disinfected by autoclaving in addition to compliance with the provisions contained in Bio-Medical waste (Management and Handling) Rules, 1998 for handling and disposal of Bio-medical waste (BMW).

Scrutiny of records related to bio-medical waste management in selected hospitals revealed the following:

- I. Authorization for management and handling of BMW as per provisions contained in (Management and Handling) Rules, 1998 was

¹⁰¹ ECR (2008-13), ECoR (2008-13), ER (2011-13), CR (2010-13), NER (2011-13), NR (2008-13), SCR (2009-13), SECR(2008-13), SR (2011-13), WR (2008-13), MR (2008-13), CLW (2008-13), DLW (2008-13), DMW (2009-13), RCF (2008-10 & 2011-13), RWF (2008-11)

¹⁰² ECR (2008-13), ECoR (2008-13), ER (2008-11), NR (2008-13), SCR (2009-13), SECR (2008-13), SR (2011-12 & 2012-13), WR (2008-11 and 2012-13), MR (2008-13), CLW (2008-13), DLW (2008-13), DMW (2009-13), RWF (2008-13).

¹⁰³ SDH/Andal of ER (2008-13), SDH/Rewari & Bandikui of NWR (2008-13), SDH/BNDM (2008-13), SDH/KGP & SDH/ADA (2012-13) of SER, SDH/NKJ & SDH/Itarsi (2008-13) of WCR and DH/Pratapnagar and Ratlam, SDH/Valsad and Workshop Hospital/Dahod (2008-13) of WR

¹⁰⁴ SDH/Gaya / ECR (2008-13, SDH/NKJ/ (2008-12) and SDH/Itarsi (2008-09(WCR))

not obtained by 27 hospitals in five¹⁰⁵ ZRs and CLW/Chittaranjan (2008-10). Bio-medical wastes were disposed off either by deep burial or burning in the open air.

- II. Test check of status of authorisation for handling BMW revealed the following:
 - i. In CR, the authorization for handling BMW in Central Hospital, Byculla was obtained only in July 2010 with validity up to October 2012. Authorisation was also not obtained for different spells during the review period by the Divisional/Sub-Divisional Hospitals at Pune, Igatpuri and Manmad (CR);
 - ii. In CH/Jaipur and Sub-Divisional Hospital, Rewari (NWR) authorization for handling BMW was obtained only from November 2011 and May 2011 respectively. Authorization was not obtained by the other hospitals and Health Units of the ZR;
 - iii. Authorization for generation and disposal of BMW for CH/SER and Divisional Hospital, Kharagpur (SER) expired on December 2012 and March 2013 respectively. No further action was taken for renewal (July/2014).
 - iv. In SR, authorization granted by the State Pollution Control Board to the agencies responsible for segregation of BMW CH/Perambur & Divisional Hospital/GOC(SR) (PCB) expired in 2012. However, collection and segregation was continued by those agencies without renewal of authorization. In SDH/Valsad and HU/Ahmadabad (WR), authorization for handling and disposal of BMW was valid up to July 2007 and June 2011 respectively;
- III. As per provisions of Water (Prevention and Control of Pollution) Act 1974 every health care establishment should ensure disinfection of liquid waste such as waste generated from laboratory and washings, disinfecting activities by chemical treatment etc. by installing Effluent Treatment Plant (ETP) / Sewage Treatment Plant

¹⁰⁵ Five HUs/NCR, DH/KUR/ECOR, Five HUs/ECOR, Nine Hospitals/HUs/NEFR (except CH/MLG), Five HUs/NER, DH/Raipur and SDH/SDL/SECR

(STP). Audit, however, observed that ETP/STP was not installed in any of the Central Hospitals except in three ZRs (NEFR, SECR and SR).

IV. Incinerators¹⁰⁶ were not available in any of the hospitals except at two hospitals of Production Units CLW/Chittaranjan and DMW/Patiala. Autoclaves¹⁰⁷ were also not available in five Central Hospitals (CR, ER, NER, NEFR and WCR) and in one hospital at RCF/ Kapurthala.

V. A test check in SCR revealed that BMW and other waste were segregated as per color code with labeled posters¹⁰⁸. In regard to HUs at RU, MBNR & RDM where only out patients were treated, injection needles were destroyed through Electric Destroyers. However, other wastes were disposed through burning or landfill instead of incineration as prescribed in Bio-Medical waste (Management and Handling) Rules, 1998. Moreover, no data was maintained regarding the quantity of waste generated at HU/RDM and GNT.

Thus, hospitals and Health Units failed in ensuring compliance with the provisions contained in Bio-Medical waste (Management and Handling) Rules, 1998 for handling and disposal of Bio-medical waste.

No reply has been received from Railway Board (July 2014) on the issue.

5.8 National Health Programmes

Hospitals and Health Units of IR are actively involved in the implementation of various National Health Programmes such as the National Tuberculosis Control Programme, National Malaria Eradication Programme, National Filaria Control Programme, Family Welfare Programme (FWP) and National AIDS Control Programme (NACO). IR receives funds from Ministry of Health and Family Welfare (MH&FW) for FWP, for control and eradication of TB from Tuberculosis Association of India (TBAI) in the form of TB Seals and for control and prevention of AIDS from NACO. Railway Board in May

¹⁰⁶ *Incinerator is the device for waste treatment for conversion of the waste into flue gas and heat*

¹⁰⁷ *An Autoclave is a pressure chamber used to sterilize equipments by subjecting them to high pressure*

¹⁰⁸ *Colour coded bins are used for collection of different types of waste such as yellow bins indicates waste which requires disposal by incineration, blue indicates wastes for incineration etc.*

2008 laid down the detailed procedure for accounting of the expenditure and the reimbursement received from the MH&FW.

Scrutiny of records relating to allotment and utilization of fund for implementation of various programs revealed the following:

- I. In five ZR¹⁰⁹, detailed accounts of the amount of ₹ 26.64 lakh raised through TB Seals were not available. In three ZR¹¹⁰, out of ₹ 2.99 lakh raised, an amount of ₹ 2.29 lakh remained unspent during the review period.
- II. In nine ZR¹¹¹, there were 4084 live cases of HIV + ve /AIDS patients. In seven ZR¹¹², out of ₹ 63 lakhs NACO funds allotted, only ₹9.23 lakh (15 per cent) were utilized. No allocation of funds was made in 10 ZR's¹¹³ and five PU's¹¹⁴
- III. The procedure laid down by the Railway Board (May 2008) for maintaining accounts in respect of amount obtained from Ministry of Health under FWP was not followed except in WCR; and
- IV. System of obtaining feedback in respect of National Health Programme was not available in five¹¹⁵ zones.

Railway Board stated (July 2014) that the outcome of the Programme could not be predicted at the beginning of the financial year. RB further asserted that the funds under National Family Welfare Programme were utilized as per actual requirement. In this connection, it is stated that the medical department of Indian Railways failed in utilizing funds allotted by the MH&FW for implementing various National Health Programmes. Moreover, the procedure for maintaining accounts in respect of amount obtained from MH&FW was not followed.

¹⁰⁹ ER, SCR, NR, WCR and WR

¹¹⁰ NFR - ₹ 19200, ECoR - ₹ 33515 and SER - ₹ 176,120

¹¹¹ ECoR, SCR, SECR, SER, SR, SWR, NWR, NCR and WR

¹¹² ECoR, ER, SCR, SER, NWR, NFR and NER

¹¹³ ECR, SWR, SR, SECR, NCR, WCR, WR, NR, CR and MR/Kolkata

¹¹⁴ CLW/Chittaranjan, DLW/Varanasi, DMW/Patiala, RCF/Kapurthala and RWF/Yelehanka.

¹¹⁵ WR, NEFR, SER, WCR and ECoR

5.9 Miscellaneous

5.9.1 Medical Audit

Medical Audit aims at improving the deficiencies in treatment and providing better health care facilities. In each hospital, a Committee of five doctors nominated from different departments of the hospital conducts audit of medical facilities. Status of medical audit in selected hospitals across ZRs revealed the following:

- I. Medical Audit was not conducted in five Central Hospitals over five Zonal Railways¹¹⁶. In respect of Central Hospital /NCR, the information regarding medical audit was not available. Out of five hospitals of PUs, medical audit was not conducted in two hospitals at DMW/Patiala and RWF/Yelehanka;
- II. Medical Audit was not conducted in nine Divisional/Sub-Divisional Hospitals across four ZRs¹¹⁷; and *(Appendix XI)*
- III. Corrective actions regarding non-maintenance of medical history, improper filing of case sheet, non recording of basic tests/investigations etc. were not taken in 10 hospitals of eight ZRs and three PUs¹¹⁸.

No reply on the issue was received from the Railway Board (July 2014).

5.9.2 Blood Banks

Blood Bank is a center within an organization or an institution for collection, grouping, cross matching, storage, processing and distribution of human blood or human Blood Products from selected donors. Blood Banks are regulated under the Drugs and Cosmetics Act 1945. Existence of blood banks is necessary in the event of emergencies.

¹¹⁶ ECR,NEFR,SCR,SR and MR

¹¹⁷ CR,ER,SR and WCR

¹¹⁸ NEFR,SECR,SR,MR,CR,CH/Patna/ECR, RH.BZA/SCR, SDH/NKJ/WCR, CLW/Chittaranjan, DLW/Varanasi and RCF/Kapurtala

Scrutiny of records revealed that Blood Banks were not available in 14 hospitals over 10 ZRs¹¹⁹ and in three PUs¹²⁰. Remedial measures on certain deficiencies such as storage of unscreened blood, detection of unexpected anti-bodies noticed (January 2013) by the Drug Inspector at Blood Bank in Central Hospital/LGD/SCR were not taken up.

No reply on the issue was received from the Railway Board (July 2014).

5.9.3 Fire Fighting

Hospital Administration should take adequate care in respect of handling of inflammable materials and regular maintenance, checking of electrical circuits for prevention of incidents of fire. Hospital staff should be trained to extinguish fire and emergency evacuation of patients. Fire drills as per local instructions of the Medical Officer in charge should be practiced once a month.

Scrutiny of records of selected hospitals of IRs revealed the following:

- I. Fire extinguishers were available in hospitals and Health Units inspected except in three hospitals¹²¹. In another three hospitals¹²², fire extinguishers were not kept in working condition;
- II. Fire drills were either not conducted or conducted partially in 26 hospitals and 23 HUs over eight ZRs¹²³ and four Production Units¹²⁴; *(Appendix XI)*
- III. In SER, adequate remedial measures were not taken in respect of deficiencies pointed out (December 2011) by Fire Safety Audit of Central Hospital/Garden Reach/SER; and

¹¹⁹ CR, ECoR, NCR, NER, NWR, SECR, SWR, WCR, WR and ECR

¹²⁰ DMW/Patiala, RCF/Kapurthala and RWF/Yelehanka

¹²¹ Health Units/TJ/SR, Metro Railway and DH/Raipur/SECR

¹²² HUs/BAM & VZM/ECoR and DH/Lumding/NEFR

¹²³ SCR, ECoR, CR, NR, SECR, MR/Kolkata, SDH/Andal (ER) and CH/Jaipur(NWR)

¹²⁴ CLW, DLW, DMW and RCF

- IV. Non-observance of special care in respect of handling of inflammable materials such as X-ray films at CH/Byculla (CR) resulted in loss of medicines costing ₹ 0.75 crore in AC drug store due to fire.

No reply on the issue was received from the Railway Board (July 2014).

Thus, the hospitals and Health Units of IRs failed in conducting periodical fire drills in order to ensure emergency preparedness. Remedial measures suggested for the Central Hospital/Garden Reach/SER were also not taken up.

5.9.4 Telemedicine

In telemedicine center, the doctor examines the patients using computer compatible equipment. The images as seen on the monitor are attached to the patient's file for online transmission to the specialist in the main hospital for consultation.

Scrutiny of records of selected hospitals of IRs revealed the following:

- I. Telemedicine facilities were not available in 30 hospitals and 30 HUs over seven ZRs and four PUs¹²⁵. *(Appendix XI)*
- II. In Kanchrapara Workshop hospital/ER, telemedicine facilities were not commissioned till December 2013, though the system was installed in August 2013 at a cost of ₹ 15 lakh;
- III. Though the facilities were provided in some hospitals of the Zonal Railways and functional but were lying idle without any usage as indicated below:
 - i. In CH/Bilaspur, DH/Raipur and Polyclinic/Motibagh (SECR), telemedicine facility had been lying idle since 2011;
 - ii. In CH/PER, DH/GOC, PGT and SDH/ED (SR), telemedicine facilities were provided at a cost of ₹ 1.08 crore remained idle since 2009;
 - iii. In NEFR, the Telemedicine facilities were installed (October 2005) at a cost of ₹ 30 lakh went out of order after about 11 months of service due to technical glitches; and

¹²⁵ CR, NR, NER, SCR, SWR, WCR, MR/Kolkata, DLW/Varanasi, DMW/Patiala, RCF/Kapurthala and RWF/Yelahanka

- iv. In WR, telemedicine facility provided at a cost of ₹ 1.47 crore was not functional since its commissioning.

No reply on the issue was received from the railway Board (July 2014).

Thus, the hospitals and Health Units of IR could not avail of the benefit of telemedicine facilities and achieve desired objectives as the facilities were either non-functional or out of order.

5.10 Conclusion

The allotment of funds for providing medical and health services to 64 lakh railway beneficiaries had no correlation with the increase or decrease in number of patients availed of treatment facilities. Inadequate budgetary control resulted in variation between the Final Grant and the Actual Expenditure. Medical Department had little budgetary control over the capital expenditure for procurement of medical equipments as the responsibility for allotment of funds rests on the Chief Mechanical Engineer of the Zonal Railways. There were cases of under-utilization of funds.

Shortage of doctors and paramedical staff resulted in idling of medical equipments and increase in dependency on hired medical practitioners/specialists with no accountability imposed on them. The available manpower was not rationally deployed. Engagement of contract medical practitioners/specialists incurring considerable expenditure could not minimize the expenditure on account of reference to non-railway hospitals for treatment.

The prescribed procedures for registration of vendors were not scrupulously followed. There were delays in centralized procurement which had contributed to the increase in local purchase of medicines. Local purchase exceeded the permissible limit of 15 *per cent* of the total budget allotment.

Medicines procured on single tender basis under PAC category varied across Zonal Railways.

There was lack of proper storage facilities in many hospitals across Zonal Railways. In absence of any prescribed periodicity, departmental stock

verification was not conducted in 35 hospitals over eight Zonal Railways and in hospitals of four Production Units. There was also shortfall in stock verification by the associate Accounts Department of the ZRs. The existing inventory management system was not adequately effective to minimise arising of surplus medicines. In five Zonal Railways, shelf life of medicines expired and could not be utilized. Besides supply of substandard drugs, there were also shortfalls in drug analysis. Despite having incurred expenditure of ₹57 crore towards repair and maintenance, audit observed several instances of failure of medical equipments.

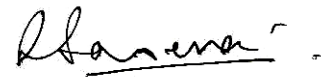
The documentation in regard to uniform Medical Identity Cards across Zonal Railways including periodical updating, maintenance of Medical History Folders and actual beneficiary data was very poor. Medical department of IR could not develop and implement Hospital Management Information System in the last two decades even after spending ₹ 66 lakh which would have facilitated in effective budgeting, documentation and good quality medical care. Since the existing facilities were not sufficient enough to cater to the higher secondary and tertiary medical care, medical department of Zonal Railways incurred expenditure of ₹1146 crore during the review period for treatment of patients in recognised non-railway hospitals. Besides non-revision of diet charges, there was also short recovery of diet charges from the eligible patients. In respect of treatment in non-railway hospitals at CGHS package rates, no diet charges were recovered as the components of diet charges and bed charges were not identifiable. Significant shortfall was observed in food and water quality check. Waste treatment facilities such as Effluent Treatment Plant, incinerator etc. were not provided in many hospitals across Zonal Railways. Hospitals and Health Units of Indian Railways failed in utilizing funds allotted by the Ministry of Health and Family Welfare for implementing various National Health Programmes. Telemedicine facilities were not provided in 60 hospitals and Health Units over seven ZRs and four Production Units. In the remaining ZRs, though telemedicine facilities were provided with substantial investment, they were either non-functional or occasionally used to meet the desired objectives.

5.11 Recommendations

- I. Health Directorate of Railway Board and Chief Medical Directors (CMDs) of Zonal Railways (ZRs) need to strengthen the process of formulation of budget with due consideration to the number of beneficiaries/patients and the infrastructural needs of the hospitals. The trend of allocation of fund for capital expenditure particularly in respect of medical equipments needs review for creating better medical facilities so as to minimise reference to non railway hospitals;*
- II. Health Directorate of Railway Board needs to prioritise its initiative to fill in the existing vacancies in Doctors/Paramedics cadre instead of depending on hiring specialists and engaging contract medical practitioners. Available resources require rationale deployment by CMDs of ZRs on the basis of bed strength and number of patients being treated in the hospitals. Railway Board also needs to take effective steps for recruitment of specialists on regular basis;*
- III. Health Directorate of Railway Board needs to strengthen the process of Centralised Purchase and adopt a uniform PAC list of medicines to minimise dependence on local purchase of medicines at higher rates;*
- IV. Health Directorate of Railway Board and CMDs of ZRs need to ensure drug analysis within the prescribed time frame to prevent recurrence of supply of sub-standard drugs;*
- V. Health Directorate of Railway Board needs to expedite the implementation of Hospital Management Information System so as to maintain Medical History Folders electronically and introduce Medical Identity Cards with photograph of individual beneficiary;*
- VI. Health Directorate of Railway Board and CMDs of ZRs need to ensure periodical revision of diet charges recoverable from the indoor patients. In the Memorandum of Understanding with the*

non-railway hospitals for treatment at package rates, specific provision relating to diet charges may be incorporated; and

- VII.** *Health Directorate of Railway Board and CMDs of ZRs may provide proper bio-medical wastes treatment facilities in all hospitals of Zonal Railways.*



(SUMAN SAXENA)

Deputy Comptroller and Auditor General

New Delhi

Dated: 17 November 2014

Countersigned



(SHASHI KANT SHARMA)

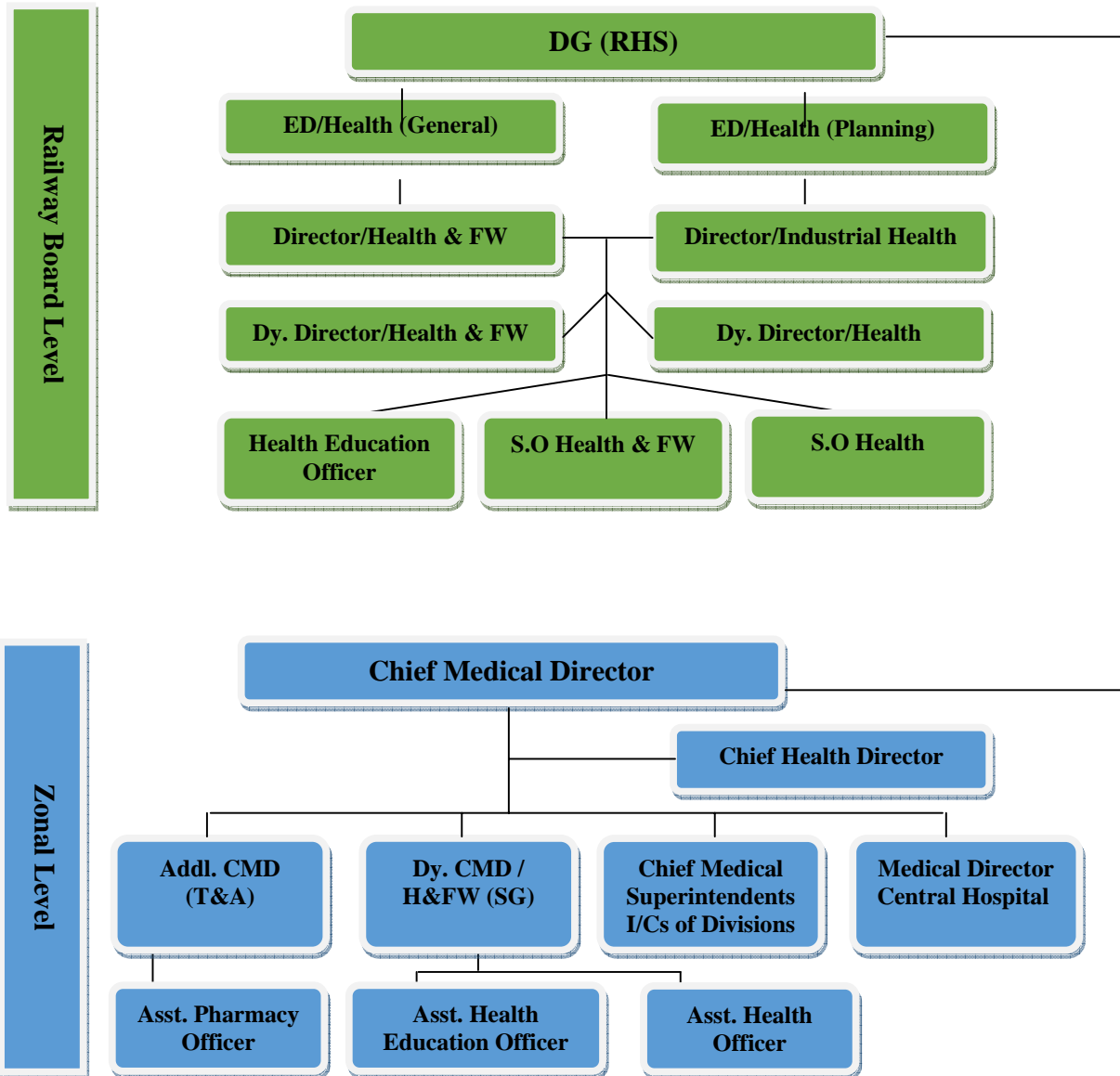
Comptroller and Auditor General of India

New Delhi

Dated: 17 November 2014

Appendix – I (Ref Para 1.1)

Ministry of Railways
(Railway Board/Member (Staff))



Source: www.indianrailways.gov.in

Appendix – II (Ref Para 1.4)**Statement showing the selection of sample size for test audit**

Sl. No.	Description	Size	Total	Sample size selected	Per cent of Sample size selected
1	Central Hospital	100 per cent	17	17	100
2	Super Specialty Hospital at Varanasi	100 per cent	1	1	100
3	Production Unit Hospitals	100 per cent	5	5	100
4	Divisional Hospital	i. One, where the number of hospital is less than four. ii. Two, where the number of hospital is equal to or more than four.	55	22	40
5	Sub-Divisional Hospitals	i. One, where the number of hospital is less than four ii. Two, where the number of hospital is equal to or more than four	42	19	45
6	Health Units	Five units from each zone.	588	89	15
7	Workshop Hospitals	One from each zone, wherever available	9	5	56

Appendix – II (Ref Para 1.4)**Statement showing the selection of sample size for test audit**

Sl. No	Zonal Railways	Central Hospital (100%)	Divisional Hospital		Sub Divisional Hospital		Workshop Hospitals		Health Units	
			Available in Zone	Selected	Available in Zone	Selected	Available in Zone	Selected	Available in Zone	Selected
1	CR	Central Hospital , Byculla, Mumbai	5	2 Kalyan, Pune	5	2 Igatpuri, Manmad		-	33	5 Thane, Kalwa, Lonavala, Nasikroad, Ghorpuri
2	ER	Central Hospital , B.R.Singh Hospital. Sealdah/ Kolkata	3	1 Malda	2	1 Andal	3	1 Kanchrapara Workshop Hospital	45	5 Barddhaman Main, Naihati, Asansol Traffic, Liluah Workshop, Jamalpur Workshop
3	ECR	Central Hospital Patna	5	2 Sonpur, Samastipur	3	1 Gaya	2	1 Rail Wheel Plant, Bela	41	5 Gomoh Main, PC/Hajipur, Loco Danapur, Darbhanga, Imali Road /Muzaffarpur
4	ECoR	Central Hospital , Bhubneswar	3	1 Khurda Road	NIL	-	NIL	-	29	5 Vizainagaram, DLS/Vizag, Talcher, Brahmapur, Titlagarh

5	NR	Central Hospital , New Delhi	5	2 Charbagh- Lucknow, Moradabad	3	1 Amritsar	1	1 Jagadhari Workshop Hospital	62	5 Arya Nagar at Ghaziabad, Amritsar Main, Ludhiana, C&W Lucknow, ROSA
6	NCR	Central Hospital , Allahabad	3	1 Jhansi	2	1 Kanpur	NIL	-	27	5 Fatehpur, Mirzapur, Agra Fort, Mathura, Gwalior
7	NER	Central Hospital , Gorakhpur Super Speciality Hospital, Cancer Research Institute, Varanasi	3	1 Badshahnagar	1	1 Gonda	NIL	-	27	5 Bareilly City, Basti, Deoria, Mau, Kanpur Anwarganj
8	NFR	Central Hospital , Maligoan, Guwahati	3	1 Lumding	5	2 New Jalpaiguri, New Tinsukia	2	1 Dibrugarh	45	5 Guwahati, New Coochbehar, Siliguri Town, Rangiya, Lumding South
9	NWR	Central Hospital, Jaipur	3	1 Lalgarh	4	2 Bandikui, Rewari	NIL	-	31	5 Jaipur Hqrs, Gatore Jagtapura, Bikaner, Sadulpur, Suratgarh
10	SR	Central Hospital , Perambur, Chennai	5	2 Golden Rock, Palghat	4	2 Villupuram, Erode	NIL	-	42	5 Sullurpet, Thanjavur, Salem, Trichur, Tirunelveli

11	SCR	Central Hospital Lallaguda, Secunderabad	3	1 Vijayawada	2	1 Kazipet	1	1 Rayanpadu	44	5 Mahbubnagar , Renigunta, Ramagundam , Nanded, Guntur
12	SER	Central Hospital , Garden Reach /Kolkata	4	2 Kharagpur, Adra	2	1 Bondamunda	NIL	-	38	5 Santragachi, Old Settlement and New Settlement in Kharagpur, North Settlement, Bokaro
13	SECR	Central Hospital , Bilaspur	1	1 Raipur	3	1 Shahadol	NIL	-	18	5 Loco HU/ Bilaspur, Bhilai, PC/Motibagh/ Nagpur, Gondia, Dongargarh
14	SWR	Central Hospital , Hubli	2	1 Bangalore	NIL	-	NIL	-	21	5 Bangarpet, Loco Colony Mysore, Arsikere, Belgaum, Hospet
15	WR	Central Hospital , Jagjivan Ram Hospital Mumbai	5	2 Pratapnagar Ratlam	2	1 Valsad	1	1 Dahod	56	5 Bandra, Borivli, Ahmedabad, Godhra, Ujjain
16	WCR	Central Hospital , Jabalpur	2	1 Kota	4	2 New Katni Jn, Itarsi	NIL	-	20	5 Satna, Narsinghpur, Swai Madhopur, Baran, Habibganj

17	MR	Tapan Sinha Memorial Hospital, Kolkata	NIL	-	NIL	-	NIL	-	3	3 Metro Bhavan Dispensary, Belgachia Lockup Dispensary, Noapara Firstaid Post
18	CLW	Kasturba Gandhi Hospital	NIL	-	NIL	-	NIL	-	5	5 Amladari, Simjury, Fatehpur, SP North, SP East
19	DLW	Railway Hospital	NIL	-	NIL	-	NIL	-	1	1 Dispensary, DLW
20	DMW	Railway Hospital, Patiala	NIL	-	NIL	-	NIL	-	NIL	-
21	RWF	Railway Hospital, Yelahanka	NIL	-	NIL	-	NIL	-	NIL	-
22	RCF	Lala Lajpat Rai Hospital, Kapurtala	NIL	-	NIL	-	NIL	-	NIL	-
	Total	23	55	22	42	19	10	6	588	89

Appendix – III (Ref Para 2.2.II)**Statement showing variations between Budget Grant (BG)/Final Grant (FG) and the Actual Expenditure (AE) of “Hospitals at Production Units” (₹ in crore)**

Year	BG	FG	AE	Variation between BG and AE (in per cent)	Variation between FG and AE (in per cent)
2008-09	29.64	36.35	16.91	-42.95	-53.48
2009-10	34.51	44.30	39.02	13.07	-11.92
2010-11	36.98	45.80	60.51	63.63	32.12
2011-12	49.94	59.23	45.28	-9.33	-23.55
2012-13	65.49	75.18	52.16	-20.35	-30.62

Source: Demand for Grants

Appendix – IV (Ref Para 2.2.III)

Statement showing allotment and expenditure of funds and number of patients treated at Central Hospitals during 2008-13 (Allotment/Expenditure in ₹ in crore and Variation in per cent)

	2008-09		2009-10		2010-11		2011-12		2012-13	
	No of Patients	Allotment/ Expenditure	No of Patients	Allotment/ Expenditure	No of Patients	Allotment/ Expenditure	No of Patients	Allotment/ Expenditure	No of Patients	Allotment/ Expenditure
ECoR	101176	2.04/2.09	98430	2.23/2.26	107488	2.44/2.59	107681	2.06/3.22	105612	2.08/3.71
Variation	-	-	-2.71	9.31/8.13	9.2	10.76/14.60	0.18	15.57/24.32	-1.92	0.97/15.22
ER	816098	8.54/25.09	910011	5.62/30.76	686387	9.11/37.53	619211	14.33/58.94	613453	10.39/55.29
Variation	-	-	11.51	34.19/22.59	-24.57	62.10/22.01	-9.79	57.30/57.05	-0.93	-27.49/-6.19
NCR	418684	32.92/32.06	203590	45.65/35.82	122624	39.95/37.08	84519	44.99/45.41	101319	51.87/50.54
Variation	-	-	-51.37	38.67/11.73	-39.77	-12.94/3.52	-31.07	12.62/22.46	19.88	15.29/11.30
NR	360181	61.29/46.02	359240	56.0/45.73	385328	47.9/45.66	369850	57.43/53.78	358525	59.5/53.89
Variation	-	-	-0.26	-8.63/-0.63	7.26	-14.46/-0.15	-4.02	19.90/17.78	-3.06	3.60/0.20
SECR	130121	10.15/10.64	143671	13.06/13.21	170556	16.57/17.11	176314	16.52/18.59	176768	23.1/22.43
Variation	-	-	10.41	28.67/24.15	18.71	26.88/29.52	3.38	-0.30/8.65	0.26	39.83/20.66
SR	390071	18.29/25.54	440688	18.67/24.09	451811	26.05/31.83	407378	23.03/39.07	461304	39.34/40.95
Variation	-	-	12.98	2.08/-5.68	2.52	39.53/32.13	-9.83	11.59/22.75	13.24	70.82/4.81
SWR	341115	15.11/13.36	339555	16.78/15.23	409100	17.33/17.65	388286	18.23/17.88	347405	26.39/24.66
Variation	-	-	-0.46	11.05/14.00	20.48	3.28/15.89	-5.09	5.19/1.30	-10.53	44.76/37.92
WCR	174986	9.75/11.22	168656	14.87/15.26	170963	12.67/15.51	186318	15.15/15.74	166304	17.52/17.15
Variation	-	-	-3.61	53.54/36.01	1.37	-14.79/1.64	8.98	19.57/1.48	-10.74	15.64/8.96
WR	638460	46.2/46.79	599924	54.95/55.4	620138	60.86/62.69	606049	63.38/62.34	596367	68.88/68.73
Variation	-	-	-6.04	18.94/18.40	3.37	10.76/13.16	-2.27	4.14/-0.56	-1.6	8.68/10.25
MR	44852	2.08/2.12	38680	2.92/2.96	42051	3.28/3.34	43609	3.66/3.69	43719	4.28/4.21
Variation	-	-	-13.76	40.38/39.62	8.72	12.33/12.84	3.71	11.59/10.48	0.25	16.94/14.09

Source: CMD/CMSs OFFICES and Central Hospitals

Appendix – V (Ref Para 3.1.1 (I), (II) & (III))				
Statement showing Shortage of Doctors in selected hospitals in 2012-13				
Central Hospital				
Name of the Hospital/Zone	Doctors as per sanctioned strength	No. of doctors available	Shortage of doctors	Percentage of shortage of doctors
CH, Byculla/CR	41	27	14	34.15
CH/ BBS/ECOR	9	9	0	0.00
CH/ Patna/ECR	20	19	1	5.00
CH/ Sealdah/ER	73	67	6	8.22
CH/ Allahabad/NCR	57	54	3	5.26
CH/ Gorakhpur/NER	33	22	11	33.33
CH/ Maligaon/NFR	34	33	1	2.94
CH/ NDLS/NR	63	60	3	4.76
CH/ Jaipur/NWR	19	15	4	21.05
CH/ LGD/SCR	41	36	5	12.20
CH/ Bilaspur/SECR	30	29	1	3.33
CH/Gardenreach/SER	39	37	2	5.13
CH/ Perumbur/SR	72	67	5	6.94
CH/ Hubli/SWR	20	17	3	15.00
CH/ Jabalpur/WCR	17	13	4	23.53
CH-JRH-BCT/WR	43	37	6	13.95
CH/MR	6	5	1	16.67
Production Units Hospital				
CLW	25	19	6	24.00
DLW	14	9	5	35.71
RWF	9	7	2	22.22
DMW	8	5	3	37.50
RCF	12	12	0	0.00
Divisional/Sub-divisional Hospitals				
DH/SDH Hospitals	611	471	140	22.91

Source: CMD/CMSs OFFICES

Appendix – VI (Ref Para 3.1.1(I))**Statement showing Patient to Doctor Ratio in selected hospitals****Central Hospital**

CH/Zonal Railway	OPD	IPD	Total No. of Patients	Doctors	Paramedical	No of Patients per One Doctor	No of Patients per One Paramedic
CH/Byculla/CR	238816	9663	248479	27	115	9202.93	2160.69
CH/BBS / ECoR	77316	1692	79008	9	99	8778.67	798.06
CH/Patna / ECR	89402	756	90158	19	111	4745.16	812.23
CH/Sealdah / ER	597424	16029	613453	67	538	9156.01	1140.25
CH /Allahabad /NCR	94751	6568	101319	54	912	1876.28	111.10
CH / Gorakhpur/NER	437592	11517	449109	22	142	20414.05	3162.74
CH / Maligaon / NFR	101905	7203	109108	33	119	3306.30	916.87
CH / NDLS/ NR	344107	14418	358525	60	510	5975.42	702.99
CH / Jaipur/ NWR	193493	6556	200049	15	137	13336.60	1460.21
CH /LGD / SCR	471650	12910	484560	36	364	13460.00	1331.21
CH / Bilaspur / SECR	171064	5704	176768	29	80	6095.45	2209.60
CH/Garden reach/ SER	174007	7746	181753	37	165	4912.24	1101.53
CH/ PER/ SR	442309	18995	461304	67	12	6885.13	38442.00
CH/Hubli/ SWR	335703	4529	340232	17	161	20013.65	2113.24
CH / Jabalpur/WCR	161164	5140	166304	13	50	12792.62	3326.08
CH /JRH-BCT/ WR	181496	11772	193268	37	121	5223.46	1597.26

Appendix – VI (Ref Para 3.1.1(III))**Statement showing Patient to Doctor Ratio in selected hospitals****Divisional and Sub –Divisional Hospital**

ZR	DH / SDH	Doctor	Paramedic	OPD	IPD	Total Patients	No. of Patients per Doctor	No. of Patients per Paramedic
CR	DH Kalyan	15	134	331616	8385	340001	22667	2537
	DH, Pune	7	60	107982	2495	110477	15782	1841
	SDH, Igatpuri	2	23	39112	328	39440	19720	1715
	SDH, Manmad	1	12	23012	127	23139	23139	1928
ECR	SDH, Gaya	6	43	20858	912	21770	3628	506
	SDH, Samastipur	16	70	157675	2642	160317	10020	2290
	SDH, Sonapur	12	111	194859	4152	199011	16584	1793
ECoR	Divl Hospital / KUR	8	61	39902	1848	41750	5219	684
ER	DH, MALDA	9	135	132530	2791	135321	15036	1002
	SDH, ANDAL	7	59	58941	2047	60988	8713	1034
NCR	DH, Jhansi / SDH Kanpur	35	541	612273	12997	625270	17865	1156
NEFR	New Jalpaiguri	15	117	83940	4453	88393	5893	755
	New Tinsukia	6	55	27238	1042	28280	4713	514
	Lumding	13	63	138765	5565	144330	11102	2291
NER	DH/BNZ, SDH, GD	11	151	491617	8083	499700	45427	3309
NR	DH, Moradabad Division	10	35	143615	4309	147924	14792	4226
	DH, Lucknow Division	23	118	550173	8493	558666	24290	4734

	SDH, Amritsar /Ferozepur Division	5	18	99560	1073	100633	20127	5591
NWR	DH/SDHs	12	135	324545	7093	331638	27637	2457
SCR	DH/BZA	24	174	424107	8495	432602	18025	2486
SECR	D H/Raipur	5	38	157331	4859	162190	32438	4268
	SDH/ Sahadol	3	16	29288	580	29868	9956	1867
SER	DHs/SDH	55	678	783504	1855 1	802055	14583	1183
SR	DHs/SDHs	101	588	487107	1036 7	497474	4925	846
SWR	RH /SBC	23	143	143431	3128	146559	6372	1025
WCR	SDH, NKJ.	4	0	121416	1999	123415	30854	-
	SDH, Itarsi	2	38	45417	933	46350	23175	1220
	DH, Kota	16	185	473289	8570	481859	30116	2605
WR	DH, Pratapnagar	9	52	243889	5748	249637	27737	4801
	DH, Ratlam	8	59	426248	7495	433743	54218	7352

Appendix VII

Annexure to Chapter 3 (Manpower Management)

Reference	Zonal Railways	CH	DH	SDH	HU	WH
<i>Medical Equipments remained idle for different spells during the review period 2008-13</i>						
Para 3.1.1 (IV) (ix)	SECR	Bilaspur	Raipur			
	NWR	Jaipur	Lalgarh	1. Bandikui 2. Rewari		
	CR	Byculla, Mumbai	1. Kalyan 2. Pune	1. Igatpuri 2. Manmad		
	ER	Sealdah/ Kolkata	Malda	Andal		
	WR	Mumbai	1. Pratapnagar 2. Ratlam	Valsad		
	NEFR	Maligoan, Guwahati	Lumding	1. New Jalpaiguri 2. New Tinsukia		
	NR	New Delhi	1. Charbagh- Lucknow 2. Moradabad	Amritsar		
	ECoR	Bhubaneswar	Khurda Road			
	CLW	Chittranjan				
	DLW	Varanasi				
TOTAL	(8 + 2) = 10	(8 + 2) = 10	11	9		
<i>Medical Equipments procured but could not be utilized due to various reasons</i>						
3.1.3 .IV (iv)	WR	Mumbai	Pratapnagar			
	NCR	Allahabad	Jhansi	Kanpur		
	MR	Kolkata				
	CR	Byculla				
TOTAL	4	4	2	1		
<i>Perspective plan for training was not prepared by medical departments</i>						

Para 3.1.5	CR	Byculla, Mumbai	1. Kalyan 2. Pune	1. Igatpuri 2. Manmad	1. Thane 2. Kalwa, 3. Lonavala 4. Nasikroad 5. Ghorpuri	
	ECR	Patna	1. Sonpur 2. Samastipur	Gaya	1. Gomoh Main 2. Hajipur, 3. Danapur, 4. Darbhanga, 5. Imali Road /Muzaffarpur	
	NR	New Delhi	1. Charbagh- Lucknow 2. Moradabad	Amritsar	1. Arya Nagar (Ghaziabad) 2. Amritsar Main, 3. Ludhiana 4. C&W Lucknow	
	SER	Garden Reach, Kolkata	1. Kharagpur 2. Adra	Bondamunda	1. Santragachi, Old Settlement Kharagpur 3. New Settlement in Kharagpur 4. North Settlement 5. Bokaro	
	SCR	Lallaguda, Secunderabad	Vijayawada	Kazipet	1. Mahbubnagar 2. Renigunta, 3. Ramagundam, 4. Nanded, 5. Guntur	Rayanpadu
	MR	Kolkata			1. Metro Bhavan Dispensary, 2. Belgachia Lockup Dispensary, 3. Noapara Firstaid Post	
TOTAL:	6	6	9	6	28	1

Source: Zonal Reports/Annexures

Appendix VIII (Para 4.1.2(I))

Statement showing the extra expenditure towards procurement of medicines on single tender basis under PAC category instead of procurement on limited tender basis in SCR

Name of the Medicine	Quantity and rates for PAC category medicines procured on single tender basis			Total quantity of medicines procured under PAC on single tender basis and expenditure incurred	Rates in limited tender	Expenditure involved Quantity of medicines procured under PAC category at Limited tender rate	Differential Amount
	1	2	3				
	2008-09	2010-11	2011-12		2012-13		
Minipress XL 5mg	94700 @ 96/15 tab	193075 @ 95.50/15 tab	107590 @ 90.45/15 tab	395365	26.98 per ten tablet		
Total	606080	1229244	648768	2484092		1066695	1417397
Minipress XL 2.5mg	104390 @ 71.80/15 tab	310175 @ 77.48/15 tab	Nil	414565	16.26 per ten tablet		
Total	499680	1602157		2101837		674083	1427754
Taze Inj (Piperacillin 4000mg + Tazobactam 5 mg Inj)	Nil	Nil	200 @ 615/1 unit	200	68 per unit		
Total			123000	123000		13600	109400
Grand Total							2954551

Source: Purchase Orders

<i>Appendix IX</i>						
Annexure to Chapter 4 (Material Management)						
Para Reference	Zonal Railways	CH	DH	SDH	HU	WH
<i>Incorrect assessment of medicines</i>						
4.1.2 (II)	ER	Sealdah	Malda			
	ECoR	BBS	KUR			
			VSKP			
	SWR	UBL	SBC			
ECR		Samastipur				
TOTAL	4	3	5			
<i>Delay in supply of medicine</i>						
4.1.2 (V)	ER	Sealdah				
	ECoR	Bhubneshwar				
	NR	New Delhi	Lucknow			
			Moradabad			
NWR	Jaipur	Lalgarh				
TOTAL	4	4	3			
<i>Lack of space in hospitals</i>						
4.2 (I)	SCR	LGD	BZA	Kazipet	RDM	
	SER			Bondamonda		
	SECR	Bilaspur	Raipur			
TOTAL	3	2	2	2	1	
<i>Storage conditions Lack of proper space</i>						
4.2 (II)	ECoR	Bhubneshwar			TIG	
	NCR	Allahabad			Agra Fort	
	NWR				Bikaner	
	SCR	Lallaguda	Vijayawada	Kazipet	RDM	
	SWR	Hubli	Bangalore			
	SER			Bondamonda		
	WCR	Jabalpur				
	WR	Mumbai Central		Ratlam	Valsad	Bandra
Borivali						
Ahmedabad						
Dahod						
					Vadodara	
TOTAL	8	6	3	3	9	
<i>Seepage from roofs and walls</i>						

4.2 (III)	CR	Byculla				
	ECoR	BBS				
	NER				Deoria	
	WCR	Jabalpur				
	WR				Bandra	
TOTAL	5	3			2	
Departmental Stock Verification						
4.3 (I)	CR		Kalyan	Manmad	Lonavala	
			Pune	Igatpuri	Nasik	
					Ghorpuri	
					Thana	
	ER	Seldah	Malda	Andal		
					NFR	Maligaon
	Rangiya					
	New Coochbehar					
	Guwahathi					
	SER	Garden Reach	Kharagpur Adra	Bondamonda	Santragachi, Old settlement	
					New settlement in Kharagpur division	
					North settlement	
					Bokaro in Adra division	
	SR	Perambur	Golden Rock			
			Palghat			
	SWR	Hubli	SBC			
	WCR	Jabalpur				
MR	Kolkata					
TOTAL	8	7	10	4	14	
Expired medicine						
4.4 (I)	CR	Byculla				
	ER			Andal		
	WR	JRH	Sabarmati			

			Ratlam			
	NEFR	Maligaon				Dibrugarh
	NER		Badshahnagar			
TOTAL	5	3	3	1		1
Shortfall in drug (2008-09)						
4.5 (I)	CR	Byculla	Pune			
			Bhusaval			
			Solapur			
			Kalyan			
	ECoR	BBS	Khurda Road			
	NFR	Maligaon	New Jalpaiguri			Dibrugarh
	NER	Gorakhpur	Badshahnagar			
	NR	New Delhi	Charbagh Lucknow			Jagadhari
	NWR	Jaipur				
	SCR	Lallaguda				RU
						Mahboobnagar
	SECR	Bilaspur				
MR	Kolkata					
Total	9	9	8		2	2
Shortfall in drug (2009-10)						
4.5 (I)	CR	Byculla	Pune			
			Bhusaval			
			Solapur			
			Kalyan			
	ECoR		KUR			
	NFR		New Jalpaiguri			Dibrugarh
			Tinsukia			
	NER	Gorakhpur	Badshahnagar			
	NR	New Delhi	Charbagh- Lucknow			Jagadhari
	NWR	Jaipur				
	SCR	Lallaguda				RU
						Mahboobnagar
Total	7	5	9		2	2
Shortfall in drug (2010-11)						
4.5 (I)	NFR	Maligaon	Tinsukia			
			New Jalpaiguri			
	NER		Badshahnagar			

	NR	New Delhi	Charbagh- Lucknow			Jagadhari	
	NWR	Jaipur					
	SCR	Lallaguda	BZA		RU		
					Mahboobnagar		
Total	5	4	5		2	1	
Shortfall in drug (2011-12)							
4.5 (I)	ECoR		KUR				
	NFR	Maligaon	Tinsukia			Dibrugarh	
			New Jalpaiguri				
	NR	New Delhi				Jagadhari	
	NWR	Jaipur					
NER		Badshahnagar					
Total	5	3	4			2	
Shortfall in drug (2012-13)							
4.5 (I)	CR		Pune				
			Bhusaval				
			Solapur				
			Kalyan				
	NFR		Tinsukia				
			New Jalpaiguri			Dibrugarh	
	NR	New Delhi	Moradabad				
	Charbagh						
NWR	Jaipur						
Total	4	2	8			1	
Substandard Drugs							
4.5 (III)	SECR	Bilaspur	Raipur				
	NWR	CH/Jaipur			Bikaner		
	ECoR	BBS	KUR				
	ER	CH/ Sealdah					
	WR	JRH-BCT	Pratapnagar			Ahmedabad	
			Ratlam				
			Rajkot				
			Bhavnagar				
			Divisional Medical Store/ BCT				
	NFR	Maligaon	Lumding				
NER		Badshahnagar					

	WCR	Jabalpur	Kota	NKJ		
TOTAL:	8	7	10	1	2	
Substandard Drugs						
4.5 (III)	ER					Kanchrapara
	WR	JRH-BCT	Ratlam		Ahmedabad	
			Rajkot			
	MR	Kolkata				
TOTAL:	3	2	2		1	1
Equipments each costing more than Rs. 15 lakh sanctioned during 2008-13 were not procured						
4.6 (II)	CR	Byculla				
	ECoR	BBS	KUR			
	ER	Sealdah				
	NCR	Allahabad	Jhansi	Kanpur		
	NER	Gorakhpur	CRI/BSB			
	NEFR	Maligaon				
	NR	New Delhi	Moradabad			
	SCR	CH/LGD	BZA			
	SECR	Bilaspur				
	SER	GRC	KGP			
	SR	PER	CMS/GOC			
			CMS/MDU			
			CMS/PGT			
	SWR	UBL	SBC			
	WR	Mumbai				
MR	Tollygunge					
TOTAL	14	14	10	1		
Equipments each cost less than Rs. 15 lakh which were sanctioned during 2008-13 crore were not procured						
4.6 (II)	ER	Sealdah	Malda			Kanchrapara
	NCR	Allahabad	Jhansi	Kanpur		
	NER		Badshahnagar			
	SECR	Bilaspur			Nagpur	
	SER	GRC	KGP			
	WR		Pratapnagar			
			Ratlam	Valsad		Dahod
	NWR	Jaipur			Bikaner	
MR	Tollygunge					
TOTAL:	8	6	6	2	2	2
Non-commissioning of Medical Equipment						

4.6 (III)	ECoR	BBS				
	NCR		Jhansi	Kanpur		
	NR	New Delhi				
	NWR	CH/Jaipur				
	SCR	LGD				
	SECR	Bilaspur				
	SER	GRC	KGP			
	SR		Palghat			
	WR	BCT				
TOTAL	9	7	3	1		
<i>Maintenance of History cards/ Log books for records relating to down time of medical equipment</i>						
4.6.1 (I)	ECoR	BBS				
	NCR		Jhansi			
	NER	CRI/BSB				
	SR	Perambur				
	WCR	Jabalpur		New Katni		
				Etarsi		
Total	5	4	1	2		
<i>Medical Equipments each costing more than Rs. 15 lakh remained out of order</i>						
4.6.1 (II)	ECoR	BBS				
	ER	Sealdah				
	NER		CRI/BSB			
	NCR		Jhansi			
	NR	New Delhi				
	SCR	LGD				
	SER	GRC				
	WR		Pratapnagar.			
TOTAL	8	5	3			
<i>Patients referred to recognized Private Hospitals</i>						
4.6.1 (VI)	ER	Sealdah	Malda			
	NCR	Allahabad	Jhansi			
				Sub Kanpur		
	NER	Gorakhpur	Badshahnagar	Gonda		
TOTAL	3	3	3	2		

Source: Zonal reports/Annexures

Appendix X (Ref para 4.1.3 (II))				
Statement Showing local purchase of medicine and surgical items more than 15 per cent of Budget Allotment				
Zonal Railway	Year	Budget allotment of Medicine & Surgical items	Total expenditure incurred on local purchase	Per Cent of local purchase w.r.t. Budget allotment
CR	2008-09	123209	29948	24.31
ECoR	2008-09	49075	9062	18.47
NCR	2008-09	69119	51711	74.81
NFR	2008-09	113923	10724	9.41
NER	2008-09	62310	33800	54.24
NWR	2008-09	131601	54835	41.67
SECR	2008-09	41056	12808	31.2
SER	2008-09	110243	58631	53.18
SR	2008-09	74703	37693	50.46
WCR	2008-09	43461	22410	51.56
WR	2008-09	256859	49338	19.21
MR	2008-09	7000	3275	46.79
CR	2009-10	115767	50814	43.89
ECoR	2009-10	45531	10123	22.23
NCR	2009-10	83371	61564	73.84
NFR	2009-10	116566	17477	14.99
NER	2009-10	65676	40809	62.14
NWR	2009-10	139466	73722	52.86
SECR	2009-10	58729	16143	27.49
SER	2009-10	101623	52415	51.58
SR	2009-10	126210	35782	28.35
SWR	2009-10	56288	95706	170.03
WCR	2009-10	46372	18470	39.83
WR	2009-10	309479	92154	29.78
MR	2009-10	7295	3118	42.74
CR	2010-11	169269	56637	33.46
ECoR	2010-11	50500	12778	25.3
NCR	2010-11	108433	52730	48.63
NFR	2010-11	105601	16403	15.53

NER	2010-11	83859	52554	62.67
NWR	2010-11	110392	74407	67.4
SECR	2010-11	66239	14237	21.49
SER	2010-11	132421	35687	26.95
SR	2010-11	174809	31000	17.73
WCR	2010-11	52572	23338	44.39
WR	2010-11	287604	75321	26.19
MR	2010-11	7147	1989	27.83
CR	2011-12	196186	33180	16.91
ECoR	2011-12	49424	16377	33.14
ER	2011-12	362395	31294	8.64
NCR	2011-12	130591	40550	31.05
NFR	2011-12	134158	16424	12.24
NER	2011-12	84454	37110	43.94
NWR	2011-12	105968	131324	123.93
SECR	2011-12	48287	13514	27.99
SER	2011-12	152980	35653	23.31
SR	2011-12	188943	28597	15.14
SWR	2011-12	69928	30795	44.04
WCR	2011-12	57966	25436	43.88
WR	2011-12	312823	84463	27
MR	2011-12	11133	2483	22.3
CR	2012-13	148720	47763	32.12
ECoR	2012-13	44997	15780	35.07
ER	2012-13	434118	41747	9.62
NCR	2012-13	117617	53988	45.9
NFR	2012-13	125004	27104	21.68
NER	2012-13	115409	44523	38.58
NWR	2012-13	145599	126660	86.99
SECR	2012-13	34783	24455	70.31
SER	2012-13	146571	45031	30.72
SR	2012-13	270145	28674	10.61
SWR	2012-13	84920	129443	152.43
WCR	2012-13	76891	22270	28.96
WR	2012-13	338465	80343	23.74
MR	2012-13	13000	2242	17.25

<i>Appendix XI</i>						
Annexure to Chapter 5 (Hospital Administration)						
Para Reference	Zonal Railways	CH	DH	SDH	HU	WH
<i>Status of implementation of HMIS</i>						
5.1	NR	New Delhi				
	SCR		Guntakal			
	ECR	Patna				
	NER	Gorakhpur				
	SECR	Bilaspur				
	ER	Seladah	Malda			
TOTAL	6	5	2			
<i>Medical Identity cards not updated</i>						
5.2.2 (I)	SCR	Lallaguda	Vijayawada, Guntur	Kazipet	1. Chilkalaguda 2. Guntur 3. Renigunta 4. DRM office, Nanded 5. Mahabubnagar	Rayana padu
	CR	Byculla	Kalyan, Pune	Igatpuri, Manmad	Thane Kalva Lonawala Nasik Road Station Ghorpuri	
	NWR	Jaipur				
TOTAL	3	3	4	3	10	1
<i>Non-maintenance of medical history folders</i>						
5.2.3 (I)	CR	Byculla	Kalyan, Pune	Igatpuri, Manmad	Thane Kalva Lonawala Nasik Road Station Ghorpuri	
	SWR	Hubli	SBC		Bangrapet Loco Colony Mysore Arsikere Belgaum Hospet	

	NWR	Jaipur	Lalgarh	Bandikui, Rewari	Bikaner Sadulpur Suratgarh Jaipur Jagatpur	
	WCR	Jabalpur	Kota	New Katni Jn, Itarsi	Habibgunj Narsinghpur Satna Sawai Madhopur Baran	
	SER	Garden Reach	Kharagpur, Adra	Bondamunda	Santragachi New Settlement (KGP) Old Settlement (KGP) North Settlement (Bokaro) North Settlement (Adra)	
	WR	Mumbai Central	Pratapnagar	Valsad	Bandra Borivali Ahmedabad Godhra Ujjain	Dahod
	MR	Kolkata			Metro Bhawan Belgachia Lockup Noapara	
	CLW				Amaladhi Simjury Fatehpur SP East SP West	
	DLW				DLW	
	CLW				CLW	
TOTAL	10	7	8	8	40	1
<i>Non Recovery of diet charges in respect of treatment at CGHS package rates</i>						

5.4 (IV) (i)	NR	New Delhi	Charbagh, Moradabad	Amritsar	Arya Nagar Ghaziabad DLI Amritsar (FZR) Ludhiana (FZR) C&W Lucknow (LKO) Rosa (MB Dn)	Jagadh ari
	SR	Perambur	GOC			
	WCR	Jabalpur	Kota	New Katni Jn, Itarsi	Habibgunj Narsinghpur Satna Sawai Madhopur Baran	
	WR	Mumbai Central	Pratapnagar, Ratlam	Valsad	Bandra Borivali Ahmedabad Godhra Ujjain	Dahod
TOTAL	4	4	5	4	15	2
MEDICAL AUDIT						
5.9.1 (II)	CR		Kalyan,	Igatpuri		
			Pune	Manmad		
	ER			Andal		
	SR	Perambur		Villupuram		
	WCR			New Katni		
TOTAL	4	1	2	6		
FIRE DRILLS						
PARA 5.9.3(ii)	SCR	Lallaguda	Vijayawada	Kazipet	Chilkalaguda (SC)	Rayana padu
			Guntur		Guntur (GNT)	
					Renigunta (GTL)	
					DRM office, Nanded	
					Mahabubnagar (HYB)	
	ECoR	Bhubaneswar	Khurda Road		Vizianagaram	
					Talcher	
					Brahmpur	
			Titlagarh			

	CR	Byculla	Kalyan	Igatpuri	Thane	
			Pune	Manmad	Kalva	
					Lonawala	
					Nasik Road Station	
					Ghorpuri	
	NR	New Delhi	Charbagh- I	Amritsar	Arya Nagar Ghaziabad DLI	
			Lucknow		Amritsar (FZR)	
					Ludhiana (FZR)	
					C&W Lucknow (LKO)	
	SECR	Bilaspur	Raipur	Shahdol	Bilaspur (Bilaspur)	
					Bhilai (Raipur)	
					Motibagh Nagpur (Nagpur)	
					Gondia (Nagpur)	
	MR	Kolkata				
	ER			Andal		
	NWR	Jaipur				
	CLW	Chittaranjan				
	DLW	Varanasi				
	DMW	Patiala				
	RCF	Kapurthala				
TOTAL	12	11	8	6	23	1
TELEMEDICINE						
PARA 5.9.4 (I)	CR	Byculla	Kalyan	Igatpuri	Thane	
			Pune	Manmad	Kalva	
					Lonawala	
					Nasik Road Station	
					Ghorpuri	
	NR	New Delhi	Charbagh- I	Amritsar	Arya Nagar Ghaziabad DLI	Jagadh ari
			Lucknow		Amritsar (FZR)	
					Ludhiana (FZR)	

					C&W Lucknow (LKO)	
					Rosa (MB Dn)	
	NER	Gorakhpur	Badshahnagar	Gonda	Bareilly City	
		Super Specialty Hospital, Varanasi			Basti	
					Deoria	
					Mau	
					Anwarganj (Kanpur)	
	SCR	Lallaguda	Vijayawada	Kazipet	Chilkalaguda (SC)	Rayana padu
			Guntur		Guntur (GNT)	
					Renigunta (GTL)	
					DRM office, Nanded	
					Mahabubnagar (HYB)	
	SWR	Hubli	Bangalore		Bangarpet	
					Loco Colony Mysore	
					Arsikere	
					Belgaum	
					Hospet	
	WCR	Jabalpur	Kota	New Katni Jn	Habibgunj	
				Itarasi	Narsinghpur	
					Satna	
					Sawai Madhopur	
					Baran	
	MR	Kolkata				
	DLW	Varanasi				
	DMW	Patiala				
	RCF	Kapurthala				
	RWF	Yelahanka				
Total	11	12	9	7	30	2

Source: Zonal reports/Annexures

Appendix XII (Reference Para 5.3.2 (IV))														
Statement showing shortage in the extent of minimum hospital specialty services at selected Divisional Hospitals														
Zone	Hospital	No of Beds	General Medicine	General Surgery	Gynae & Obst	Dental Surgery	Paediatrics	Orthopedics Surgery	Ophthalmology	Chest Medicine	ENT Surgery	Radiology	Pathology	Shortage in number of Speciality
CR	Pune	50	Yes	Yes	Yes				Yes				Yes	7
ECoR	Khurda Road	80	Yes	Yes		Yes	Yes						Yes	7
ER	Malda	101	Yes	Yes	Yes		Yes		Yes					7
NCR	Jhansi	205	Yes	Yes	Yes		Yes	Yes		Yes	Yes			5
NWR	Lalgarh	100	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes		3

Source: Respective Zonal websites

APPENDIX XIII (Reference Para 5.4(v))

STATEMENT SHOWING LOSS DUE TO INADEQUATE PROVISION OF OVERHEAD FOR CALCULATING THE COST OF DIET																					
Zonal Railways	2008-09				2009-10				2010-11				2011-12				2012-13				Total
	Hospital	Amount due from patients	Actual Expenditure incurred by the Hospital on diet	Shortfall in charging overhead	Hospital	Amount due from patients	Actual Expenditure incurred by the Hospital on diet	Shortfall in charging overhead	Hospital	Amount due from patients	Actual expenditure incurred by the Hospital on diet	Shortfall in charging overhead	Hospital	Amount due from patients	Actual expenditure incurred by the Hospital on diet	Shortfall in charging overhead	Hospital	Amount due from patients	Actual expenditure incurred by the Hospital on diet	Shortfall in charging overhead	
CR	CH	26406	101712	75306	CH				CH	30024	115648	85624	CH	26055	125450	99395	CH	53790	127140	73350	333675
	DH/SDH			0	DH/SDH (1)	8532	39500	30968	DH/SDH (1)				DH/SDH				DH/SDH				30968
ECR	CH			0	CH			0	CH				CH				CH				0
	DH/SDH (1)	7602.00	50000.00	42398	DH/SDH (3)	269819	653376	383557	DH/SDH (1)	14964	156000.00	141036.0	DH/SDH				DH/SDH				566991
ECoR	CH			0	CH	45390	160303	114913	CH	105425	129930	24505	CH	89315	155374	66059	CH	120791	197780	76989	282466
	DH/SDH			0	DH/SDH (1)	170483	421443	250960	DH/SDH (1)	236930	470146	233216	DH/SDH (1)	235539	462772	227233	DH/SDH (1)	176780	450120	273340	984749
	WSH			0	WSH			0	WSH				WSH				WSH				0
ER	CH	29351	119199	89848	CH	4413482	5478310	1064828	CH	4978467	5851843	873376	CH	5516488	6032918	516430	CH	6063022	7132393	1069371	3613853
	DH/SDH (2)	140509	348687	208178	DH/SDH (2)	236287	439229	202942	DH/SDH (2)	222139	365229	143090	DH/SDH (2)	221135	379648	158513	DH/SDH (2)	201554	349602	148048	860771
	WSH	51570	646654	595084	WSH	44403	629433	585030	WSH	61181	520249	459068	WSH	133997	438517	304520	WSH	102419	322764	220345	2164047
NCR	CH			0	CH			0	CH				CH				CH				0
	DH/SDH (1)	6966	14706	7740	DH/SDH (1)	5346	13860	8514	DH/SDH (1)	8991	27306	18315	DH/SDH (1)	2943	9156	6213	DH/SDH (1)	13608	78624	65016	105798
	WSH			0	WSH			0	WSH				WSH				WSH				0
NEFR	CH	874956	2212257	1337301	CH	1279094	2308362	1029268	CH	1601546	2550084	948538	CH	1377947	2908290	1530343	CH	605303	2981256	2375953	7221403
	DH/SDH (2)	261422	466354	204932	DH/SDH (2)	382314	466962	84648	DH/SDH (2)	388174	518556	130382	DH/SDH (2)	424891	567308	142417	DH/SDH (2)	347358	479281	131923	694302
	WSH	234271	406789	172518	WSH	365702	474240	108538	WSH	397132	578553	181421	WSH	383834	623575	239741	WSH	290293	663894	373601	1075819
NER	CH	868525	999759	131234	CH	927656	1118033	190377	CH	891480	1296868	405388	CH	1223640	1318046	94406	CH	980520	1061834	81314	902719
	DH/SDH (2)	150012	455116	305104	DH/SDH	289240	448538	159298	DH/SDH	360506	381915	21409	DH/SDH (2)	414945	620150	205205	DH/SDH	502605	526597	239	
	WSH			0	WSH			0	WSH				WSH				WSH				0
NR	CH	617454	1938418	1320964	CH	615250	3528497	2913247	CH	725447	3858573	3133126	CH	920796	3164604	2243808	CH	1033292	3658512	2625220	12236365
	DH/SDH (3)	52317	744645	692328	DH/SDH (3)	55013	674792	619779	DH/SDH (3)	47413	455226	407813	DH/SDH (2)	77328	417904	340576	DH/SDH (3)	57072	523795	466723	2527219
	WSH	713	70798	70085	WSH	910	57037	56127	WSH	385	43959	43574	WSH	0	27876	27876	WSH	0	11302	11302	208964
NWR	CH			0	CH			0	CH				CH				CH				0
	DH/SDH (1)		10779	10779	DH/SDH (1)	0	12886	12886	DH/SDH				DH/SDH				DH/SDH				23665
	WSH			0	WSH			0	WSH				WSH				WSH				0
SCR	CH	0	2414715	2414715	CH	1559998	2523150	963152	CH	1261820	2237772	975952	CH	996734	2244789	1248055	CH	819323	2221742	1402419	7004293
	DH/SDH			0	DH/SDH			0	DH/SDH				DH/SDH				DH/SDH				0
	WSH			0	WSH			0	WSH				WSH				WSH				0
SECR	CH	121440	427950	306510	CH	214549	567311	352762	CH	272061	638842	366781	CH	277311	838906	561595	CH	297931	853950	556019	2143667
	DH/SDH (1)	22165	73928	51763	DH/SDH (1)	45925	129899	83974	DH/SDH (1)	34980	96751	61771	DH/SDH (1)	37125	117837	80712	DH/SDH (1)	13255	76835	63580	341800
	WSH			0	WSH			0	WSH				WSH				WSH				0

STATEMENT SHOWING LOSS DUE TO INADEQUATE PROVISION OF OVERHEAD FOR CALCULATING THE COST OF DIET																						
SER	CH	1854907	2295780	440873	CH	1859628	2973108	1113480	CH	2084708	2953385	868677	CH	2188268	3141910	953642	CH	2375295	3994572	1619277	4995949	
	DH/SDH (2)	702431	1197281	494850	DH/SDH (3)	367088	670920	303832	DH/SDH (3)	710466	1359961	649495	DH/SDH (3)	742000	1291711	549711	DH/SDH (3)	778539	1754262	975723	2973611	
	WSH			0	WSH			0	WSH				WSH				WSH				0	
SR	CH	1566720	1929112	362392	CH	1864800	2610876	746076	CH				CH				CH				1108468	
	DH/SDH	2106240	2683949	577709	DH/SDH (2)	470270	506460	36190	DH/SDH (3)	649825	877000	227175	DH/SDH (1)	631295	669000	37705	DH/SDH (1)	685780	771743	85963	964742	
SWR	CH			0	CH	540588	1061934	521346	CH				CH	735208	982775	247567	CH	584854	847263	262409	1031322	
	DH/SDH (1)	81129	125585	44456	DH/SDH (1)	78050	134631	56581	DH/SDH (1)	83561	123649	40088.00	DH/SDH (1)	77683	104340	26657	DH/SDH (1)	61406	100236	38830	206612	
WCR	CH	233440	482851	249411	CH	252886	471016	218130	CH	285042	518072	233030	CH	354023	724693	370670	CH	460029	686233	226204	1297445	
	DH/SDH (3)	180037	646810	614853	DH/SDH (3)	200138	449933	411665	DH/SDH (2)	157823	497663	339840	DH/SDH (2)	208863	491998	283135	DH/SDH (2)	157116	511639	354523	2004016	
	WSH			0	WSH			0	WSH				WSH				WSH				0	
WR	CH			0	CH			0	CH				CH	3433023	4511273	1078250	CH	3779485	5466958	1687473	2765723	
	DH/SDH (4)	465576	1524535	1058959	DH/SDH (4)	496296	1568158	1071862	DH/SDH (4)	832739	2040885	1208146	DH/SDH (4)	711561	1830766	1119205	DH/SDH (4)	486817	1750365	1263548	5721720	
	WSH	156177	323055	166878	WSH	200848	355641	154793	WSH	237206	489961	252755	WSH	190536	545957	355421	WSH	0	459497	459497	1389344	
Metro Railway				0				0		80914	388699	307785		261117	698654	437537		436244	862762	426518	1171840	
CLW	Chittaranjan	166807	511912	345105	Chittaranjan	170114	596167	426053	Chittaranjan	389804	525274	135470	Chittaranjan	212899	614254	401355	Chittaranjan	154255	555302	401047	1709030	
DLW	Varanasi	39817	64482	24665	Varanasi	45037	80362	35325	Varanasi	30740	58363	27623	Varanasi	42028	59208	17180	Varanasi	71400	81058	9658	114451	
DMW	Patiala			0	Patiala			0	Patiala				Patiala				Patiala				0	
RCF	Kapurthala	0	876404	876404	Kapurthala	0	1346633	1346633	Kapurthala	0	1287082	1287082	Kapurthala	0	1427924	1427924	Kapurthala	0	1642177	1642177	6580220	
RWF	Yelahanka			0	Yelahanka			0	Yelahanka				Yelahanka				Yelahanka				0	
Total	CH	6399823	14374551	7974728	CH	13788472	24824062	11035590	CH	12737478	22410435	9672957	CH	17654852	28949068	11294216	CH	17835534	32370932	14535398		
	DH/SDH	4176406	8342375	4314049	DH/SDH	3074801	6630587	3717656	DH/SDH	3748511	7370287	3621776	DH/SDH	3785308	6962590	3177282	DH/SDH	3481890	7373099	3891209		
	WSH	442731	1447296	1004565	WSH	611863	1516351	904488	WSH	695904	1632722	936818	WSH	708367	1635925	927558	WSH	392712	1457457	1064745		
2008-09				13293342	2009-10			15657734	2010-11				14231551	2011-12			15399056	2012-13			19491352	78073035