

5.3 Functioning of Trauma Care Centres

5.3.1 Introduction

GoI envisaged (November 1999) a scheme for developing a network of Trauma Care Centres (TCCs) along the Golden Quadrilateral, to provide emergency treatment to accident victims. The scheme involved provision of financial assistance for upgradation and strengthening of emergency facilities in State hospitals located on National Highways. The hospitals designated by the State Government and approved by GoI, were to be upgraded to Levels I to IV within a period of twelve months from the date of sanction. The grants covered various components like civil works, equipment, manpower, communication systems, training, legal assistance, etc. depending on the level of upgradation of a particular hospital.

In Andhra Pradesh, 17 hospitals⁸ (Level-II: 9; Level-III: 8) were selected (2004-09) for upgradation as TCCs at a cost of ₹ 125.25 crore⁹. As of August 2011, GoI released ₹ 49.08 crore¹⁰ to these hospitals.

GoI sanction had stipulated specific time frame within which the released funds were to be utilised as follows:

- Tendering for equipments should be completed within a period of 10 days of receipt of sanction letter.
- Manpower required should be finalised within 30 days for each of the Trauma Care Centre (TCC), etc.
- The expenditure statement, utilisation certificate should be submitted to GoI within 12 months for considering further release of funds.

Audit scrutiny (April/May and October 2010) of the relevant records of the hospitals concerned revealed that none of the 17 TCCs were fully operational as of August 2011 due to non-completion of civil works or, where the civil works had been completed, equipment had not been procured or, required manpower had not been put in place.

5.3.2 Execution of civil works

The scheme envisaged renovation of existing hospital buildings¹¹ for Trauma Care. In the hospitals which were to be upgraded to Level-II and Level-III, certain civil works for operationalisation of Trauma Care Centres were to be taken up and completed. As per the scheme guidelines, all the civil works were to be completed within a maximum period of 12 months of the sanction.

⁸ **Level-II:** 2004-05: Government General Hospital, Kurnool; 2005-06: King George Hospital, Visakhapatnam; 2006-07: District Hospital, Srikakulam; 2007-08: District Hospital, Rajahmundry; Government General Hospital, Guntur; District Hospital, SPS Nellore; 2008-09: RIMS, Adilabad; District Hospital, Nizamabad; and Government General Hospital, Anantapur

Level-III: 2006-07: District Hospital, Eluru; 2007-08: Area Hospital, Tuni; Area Hospital, Tekkali; District Hospital, Ongole; CHC, Nayudupeta; 2008-09: Area Hospital, Kamareddy; District Hospital, Mahboobnagar and CHC, Penukonda, Anantapur

⁹ ₹ 9.65 crore each for nine Level-II TCCs and ₹ 4.80 crore each for eight Level-III TCCs

¹⁰ construction activities: ₹ 12.04 crore; equipment: ₹ 31.55 crore; manpower: ₹ 4.98 crore; other minor items like training, legal assistance, etc.: ₹ 0.51 crore)

¹¹ Projected Cost/Sanction accorded: Level II: ₹ 80 lakh; Level III: ₹ 63 lakh/₹ 65 lakh

The hospitals placed the amounts intended for civil works with the Andhra Pradesh Health and Medical Housing and Infrastructure Development Corporation (APMHIDC), the nodal agency created (May 1987) by the State Government for construction of buildings, procurement and supply of equipment for all the Medical institutions in the State. Hospital-wise details of the amounts released during January 2005 to April 2010 for civil works, amounts deposited with APMHIDC, stage of completion, etc. are given in *Appendix-5.2*.

We observed that:

- civil works were completed (August 2011) only in seven hospitals¹² (expenditure: ₹ 4.71 crore) and delays in completion of works ranged from three months to as high as three years;
- in seven out of 17 other hospitals¹³, civil works had not been completed. In Government General Hospital, Anantapur, even the land required for construction had not been identified; and
- in three other hospitals, viz., Rajiv Institute of Medical Sciences (RIMS), Srikakulam; Government General Hospital, Guntur and RIMS, Adilabad, civil works of TCC building was clubbed with civil works being executed in other buildings of the same hospitals. Since these buildings were at various stages of execution, civil works of TCC buildings was also delayed.

Tardy progress in completion of the buildings to house TCCs resulted in release of further funds amounting to ₹ 76.17 crore by GoI, towards other components like equipment, etc. being put on hold, as discussed in the subsequent paragraphs.

5.3.3 Procurement of equipment

GoI's sanction stipulated that tendering for equipments¹⁴ should be completed within a period of 10 days of receipt of sanction. On finalisation of tenders and after receipt of these documents in the Ministry, the next instalment of 40 *per cent* would be considered for release. The remaining 10 *per cent* would be released after placement of supply order. Thus, there was an inherent need to complete the process of procurement of equipment at the earliest. As most of the basic and essential equipment was already available with the identified institutions, assistance for equipment was restricted (by GoI) to ₹ 5 crore in respect of Level II TCC and ₹ 2 crore in respect of Level III TCC. This would imply that the hospitals were to identify/select only such of the vital equipments which are very critical to trauma care centres. We observed that such an exercise was lacking in all the test checked hospitals.

¹² King George Hospital, Visakhapatnam; District Hospital, Rajahmundry, East Godavari; Government General Hospital, Kurnool; District Hospital, Tekkali, Srikakulam; Area Hospital, Tuni, East Godavari; District Hospital, Eluru, West Godavari and RIMS, Ongole, Prakasam

¹³ District Hospital, SPS Nellore, Government General Hospital, Anantapur, District Hospital, Nizamabad, Community Health Centre, Naidupet, SPS Nellore, Area Hospital, Kamareddy, Nizamabad, District Hospital, Mahboobnagar and Community Health Centre, Penukonda, Anantapur

¹⁴ Cost involved: ₹ 12.80 crore for Level II TCC; ₹ 2.53 crore for Level III TCC

As against the release of ₹ 31.55 crore¹⁵ by GoI towards procurement of equipment to nine hospitals, the hospitals had placed ₹ 28.37 crore with APMHIDC (details are given in *Appendix-5.3*) for supply of equipment. As of August 2011, APMHIDC had supplied equipment worth only ₹ 13.20 crore leaving ₹ 15.17 crore unutilised with them. In response to an audit enquiry, APMHIDC stated (September 2011) that tenders in respect of the equipment indented for TCCs were still under process. It was further observed that,

- Except Government General Hospital (GGH), Kurnool, none of the other eight hospitals could fully utilise the funds meant for procurement of equipment. While GGH, Kurnool, utilised the entire amount of ₹ 5.27 crore, five hospitals¹⁶ had received only equipment valuing ₹ 7.93 crore as against ₹ 16.35 crore released for the purpose to APMHIDC. Some of this equipment thus procured was not as prescribed by GoI for upgradation of TCCs.
- Two hospitals viz., (a) Government General Hospital, Guntur and (b) District Hospital (RIMS) Ongole, were not supplied any equipment by APMHIDC though necessary funds (₹ 7 crore) were placed at its disposal in December 2010/January 2011. Reasons for delay were not available with the hospitals.
- In Area Hospital, Tuni, ₹ 2.17 crore intended for purchase of equipment, were kept by the hospital in fixed bank deposits instead of transferring it to APMHIDC. Specific reasons for non-utilisation of the amount were not furnished by the hospital authorities.
- In case of both Level-II and Level-III TCCs, the assistance in respect of General Surgical equipments was restricted to 2 sets (total cost limited to ₹ 4 lakh) only. We observed in King George Hospital, Visakhapatnam that, some of the important equipments such as Ultra Sound Scan, 500 MA X-Ray machine and CT Scan Multi-slice could not be procured by the hospital, where general surgical equipments had been purchased in excess. The Superintendent of the hospital contended (May 2010) that, as the hospital has the potential to emerge as Level-I centre (from existing Level-II), more number of sets of surgical equipment required for a full fledged Level-I centre were procured. The reply is not acceptable as procurement of more sets of general surgical equipment should not be at the cost of vital trauma care equipment viz., Ultra Sound Scan, 500MA X-ray machine and CT Scan Multi-slice required for effective functioning as a Level-II Trauma care centre.

Thus, while APMHIDC was ineffective in speedy procurement and supply of equipment, the Superintendents of the hospitals also had failed to monitor this aspect vigorously resulting in non-receipt of the indented equipment even after the lapse of considerable time after placing the indents with APMHIDC and funds remaining unused.

¹⁵King George Hospital, Visakhapatnam: ₹ 5.01 crore; RIMS, Srikakulam: ₹ 2.94 crore; District Hospital, Rajahmundry: ₹ 2.85 crore; Government General Hospital, Guntur: ₹ 5.00 crore; District Hospital, SPS Nellore: ₹ 4.95 crore; Government General Hospital, Kurnool: ₹ 5.02 crore; Area Hospital, Tuni, East Godavari: ₹ 2.17 crore; District Hospital, Eluru, West Godavari: ₹ 1.61 crore and RIMS, Ongole, Prakasam: ₹ 2.00 crore

¹⁶King George Hospital, Visakhapatnam: ₹ 3.80 crore; RIMS, Srikakulam: ₹ 0.41 crore; District Hospital, Rajahmundry, East Godavari: ₹ 0.51 crore; District Hospital, SPS Nellore: ₹ 2.76 crore; District Hospital, Eluru, West Godavari: ₹ 0.45 crore

5.3.4 Manpower

As per the Scheme guidelines, GoI would meet the expenditure on manpower necessary for the Trauma Care Centres during the first five years of their existence. GoI accordingly released (March 2008 – October 2010) ₹ 4.98 crore (for one year) to the State at the rate of ₹ 0.76 crore for six ¹⁷ Level-II hospitals and ₹ 0.42 crore to one ¹⁸ level-III hospital. Although the State Government was to finalise the required manpower for each TCC within the stipulated period of 30 days of receipt of sanction of the grant, it accorded sanction for recruitment of staff for the TCCs, that too only for 10 (out of 17) hospitals in March 2009.

We observed that,

- the staff sanctioned was not as per the approved norms applicable for Level-II and Level-III TCCs (as detailed in *Appendix 5.4*).
- Even in the hospitals where manpower was sanctioned, as against the prescribed norm of 84 for Level-II hospitals and 75 for Level-III hospitals, staff actually recruited was far lower and ranged between three to seventeen.
- Further, the hospital authorities recruited only Data Entry Operators and staff nurses, that too only partially, while other technical staff like General Surgeon, Orthopaedic Surgeon, Anesthetist, Medical/Para Medical staff critical for TCCs were not recruited.
- In Government General Hospital, Kurnool where the upgradation of the hospital to TCC had been sanctioned way back in the year 2004 and where the required building had already come up and the required equipment had been procured, no staff had been sanctioned by the State Government as of August 2011, despite the lapse of over five years.

Thus, Government's failure in planning and managing the activity of recruitment and deployment of technical manpower to the hospitals resulted in non-execution of the project within the prescribed timelines.

The hospital authorities contended (June 2011) that, the TCCs were extending treatment to accident victims with the existing staff. The contention is not acceptable, because in the absence of specialised staff as envisaged in GoI's sanction the TCCs cannot be considered fully operational.

5.3.5 Utilisation Certificates

We analysed the reasons as to why the funds (₹ 125.25 crore) sanctioned were not released in full by GoI to the hospitals. While releasing funds, GoI stipulated that, Utilisation Certificates (UCs) along with the audited accounts of the funds sanctioned should be submitted to the Ministry within 12 months of release of funds to ensure further releases. We observed that, except King George Hospital, Visakhapatnam, none of the other 16 hospitals had utilised the funds as detailed above, nor furnished as of April 2011 UCs for

¹⁷ District Hospital, SPS Nellore; District Hospital, Rajahmundry; GGH, Guntur; GGH, Kurnool; KGH, Visakhapatnam; and RIMS Srikakulam

¹⁸ District Hospital (RIMS), Ongole

the full amounts received. As against ₹ 49.08 crore released by GoI, UCs for ₹ 31.72 crore were yet to be furnished by the hospitals and non-compliance of this requirement resulted in further release of funds (₹ 76.17 crore) by GoI being withheld, as mentioned in para *supra*.

5.3.6 Conclusion

The 17 Trauma Care Centres (TCCs) sanctioned (2004-09) by GoI have either not been set up or are yet to become fully operational as of August 2011, either due to the civil works not being completed, or where completed, due to delay in procurement of equipment and absence of requisite manpower. Thus, the objective of providing basic life support and emergency care in the golden hour i.e., first hour of injury to accident victims in the Golden Quadrangle within Andhra Pradesh remains unachieved even after the lapse of over two to five years of necessary sanctions having been accorded by GoI.

The matter was reported to Government in July 2011; reply had not been received (December 2011).

5.4 Functioning of equipment in Medical colleges

Scrutiny of the records relating to utilisation of equipment in Government Medical College, Anantapur (November 2010) and Siddhartha Medical College, Vijayawada (June 2010) and the relevant records in the Office of the Director of Medical Education (DME) revealed the following.

5.4.1 Government Medical College, Anantapur

Government Medical College, Anantapur, receives at least 50 cancer patients every month. GoI released (December 2005) ₹ 2 crore as one time grant to the college under National Cancer Control Programme (NCCP) for development of Oncology wing based on the proposals submitted (January 2004) by the College through the State Government.

For commissioning of Oncology wing, the following steps were to be taken:

- Purchase of necessary equipment
- Construction of bunker as per the norms prescribed by BARC¹⁹ for installation of the equipment
- Deployment of technically qualified staff for manning the Oncology wing

Equipment consisting of treatment planning system, Cobalt Unit “60” tele-therapy system and source costing ₹ 2.12 crore²⁰ was received during July 2006 - December 2007. In order to put the equipment to use and commission the Oncology wing, simultaneous action was to be taken to ensure synchronization of all the above three activities. We however, found that such an exercise was not undertaken by the Medical College. Though requisite funds (₹ 41 lakh) for construction of bunker were placed at the disposal of APHMHIDC²¹ in

¹⁹ Bhabha Atomic Research Centre

²⁰ Treatment planning system (₹ 0.31 crore); Cobalt unit “60” tele-therapy system (₹ 1.24 crore) and Source (₹ 0.42 crore); Custom charges on the above equipment (₹ 0.15 crore) funds over and above ₹ 2 crore met from Hospital Development Society funds

²¹ AP Health and Medical Housing and Infrastructure Development Corporation Limited

Appendix-5.2
(Reference to paragraph 5.3.2 page 55)

Details of funds released in respect of civil works, funds placed at the disposal of APHMHDC and expenditure incurred thereon, etc.

(₹ in crore)

Name of the Hospital/ District	Year of sanction/ Level	Projected Cost	Funds released	Funds released for civil works	Amount released to APHMHDC	Expenditure incurred on construction	Balance funds available with APHMHDC	Remarks, if any
King George Hospital, Visakhapatnam	2004-05/ 2007-08 Level II	9.65	6.60	0.80	0.80	0.60	0.20	Building completed
RIMS, Srikakulam	2007-08 Level II	9.65	4.44	0.80	0.80	0.80	0	Construction merged with RIMS Hospital building
District Hospital, Rajahmundry	2006-07 Level II	9.65	4.44	0.63	0.63	0.90	(-) 0.27	Building completed
GGH, Guntur	2008-09 Level II	9.65	6.59	0.80	0.80	0.80	0	Construction merged with PPGMCANA hospital
District Hospital, SPS Nellore	2004-05/ 2007-08 Level II	9.65	6.60	0.80	0.80	Details not available*	Details not available*	Building not yet completed
RIMS, Adilabad	2008-09 Level II	9.65	0.80	0.80	0.80	0.72	0.08	Construction merged with RIMS Hospital building
District Hospital, Nizamabad	2008-09 Level II	9.65	0.80	0.80	0.80	0.02	0.78	TCC proposed to be changed to Area Hospital, Armoor
GGH, Kurnool	2004-05/ 2008-09 Level II	9.65	6.60	0.63	0.63	0.63	0	Building completed
GGH, Anantapur	2008-09 Level II	9.65	0.80	0.80	0.60	0	0.60	Land yet to be identified
District Hospital Tekkali, Srikakulam	2008-09 Level III	4.80	0.65	0.65	0.65	0.61	0.04	Building completed
Area Hospital Tuni, East Godavari	2008-09 Level III	4.80	2.82	0.65	0.65	0.65	0	Building completed
District Hospital Eluru, West Godavari	2007-08 Level III	4.80	2.24	0.63	0.63	0.67	(-) 0.04	Building completed
District Hospital (RIMS) Ongole	2008-09 Level III	4.80	3.10	0.65	0.65	0.65	0	Building completed
Community Health Centre, Naidupet, SPS Nellore	2008-09 Level III	4.80	0.65	0.65	0.65	0	0.65	Building not yet completed
Area Hospital, Kamareddy, Nizamabad	2008-09 Level III	4.80	0.65	0.65	0.65	0	0.65	Building not yet completed
District Hospital Mahboobnagar	2008-09 Level III	4.80	0.65	0.65	0.65	0	0.65	Building not yet completed
Community Health Centre, Penukonda, Anantapur	2008-09 Level III	4.80	0.65	0.65	0.65	0	0.65	Building not yet completed
Total		125.25	49.08	12.04	11.84	7.05		

*Details of expenditure incurred and balance funds available with the executing agency are not available in the records

Source: Information obtained from the respective hospitals

Appendix-5.3
(Reference to paragraph 5.3.3 page 56)

Details of funds released in respect of equipment, funds placed at the disposal of APMHIDC and expenditure incurred thereon, etc.

(₹ in crore)

Name of the Hospital/ District	Year of sanction/ Level	Total Cost	Funds released	Funds released equipment	Amount released to APMHIDC	Expenditure incurred on equipment	Balance funds available with APMHIDC	Remarks, if any
King George Hospital, Visakhapatnam	2004-05/ 2007-08 Level II	9.65	6.60	5.01	5.00	3.80	1.20	
RIMS, Srikakulam	2007-08 Level II	9.65	4.44	2.94	2.94	0.41	2.53	
District Hospital, Rajahmundry	2006-07 Level II	9.65	4.44	2.85	2.85	0.51	2.34	
GGH, Guntur	2008-09 Level II	9.65	6.59	5.00	5.00	0.00	5.00	Equipment not supplied till date
District Hospital, SPS Nellore	2004-05/ 2007-08 Level II	9.65	6.60	4.95	4.95	2.76	2.19	
GGH, Kurnool	2004-05/ 2008-09 Level II	9.65	6.60	5.02	5.02	5.27	(-) 0.25	
Area Hospital Tuni, East Godavari	2008-09 Level III	4.80	2.82	2.17	0.00	0.00	0.00	Funds kept in banks as fixed deposits
District Hospital Eluru, West Godavari	2007-08 Level III	4.80	2.24	1.61	0.61	0.45	0.16	
District Hospital (RIMS) Ongole	2008-09 Level III	4.80	3.10	2.00	2.00	0.00	2.00	Equipment not supplied till date
			43.43	31.55	28.37	13.20	15.17	

Source: Information obtained from the respective hospitals

Appendix-5.4
(Reference to paragraph 5.3.4 page 57)

Details of staff prescribed for functioning of Trauma Care Centres and number of personnel recruited in the hospitals

Details of staff to be provided as per the norms	As per norms Level II	As per norms Level III	KGH, VSP Level II	RIMS, SKLM Level II	District Hospital, EG Dist Level II	GGH, Guntur Level II	District Hospital SPS Nellore Level II	GGH, Kurnool Level II	District Hospital, Ongole Level III
General Surgeon	3	3	-	-	-	-	-	-	-
Orthopaedic Surgeon	3	3	-	-	-	-	-	1	-
Anesthetist	3	3	-	-	-	-	-	-	-
Casualty Medical Officers	8	4	-	-	-	-	-	1	-
Staff Nurses	40	25	-	-	-	-	-	5	-
Nursing Attendants	16	13	10	10	-	-	-	6	6
O.T Technicians	5	5	-	-	-	-	-	-	-
Lab Technicians	2	2	2	3	-	-	3	-	1
Radiographer	4	4	-	-	-	-	-	4	-
Sweepers		13	-	-	-	-	-	-	-
	84	75	12	13	-	-	3	17	7

Source: Information obtained from the respective hospitals