Department of Health and Family Welfare Services

3.6 Procurement and utilisation of equipment in district/taluk hospitals

Equipment to all the hospitals, as assessed, was not supplied resulting in non-achievement of the objective of the Government to establish ICUs in all district and taluk hospitals. ICUs established at a cost of ₹98.71 lakh in five test checked taluk hospitals and one district hospital were not functional. Besides, the non-utilisation of various equipment resulted in non-availability of clinical/diagnostic services to the patients.

The components of a strong health system include health services, human resources, health financing, medicines and technologies, health information and governance. A good health service is that which delivers effective, safe, quality, individual and population based health interventions to those who need them, as and when required, with optimal use of resources, at a cost that the individual and community can afford.

In order to provide healthcare services to patients with serious health complications, the Hon'ble Chief Minister in his Budget speech of 2015-16 announced establishment of Intensive Care Units[58] (ICUs) with ventilator in all district hospitals and few taluk hospitals. Subsequently, Government of Karnataka decided to establish ICUs in all districts as well as taluk hospitals.

A Performance audit on 'Health care facilities in State Sector Hospitals including Autonomous and Teaching Hospitals' conducted during January to July 2015 covering the period 2010-15 was included in the Report of the Comptroller and Auditor General of India on General and Social Sector for the year ended March 2015 (Report No.1 of the year 2016). The report highlighted non-availability of equipment as well as non-utilisation of equipment due to shortage of staff in clinical services which included ICU also. In response to the observation, the Government had stated that due to shortage of staff, some of the equipment were not utilised. It further stated that steps had been taken in 2015-16 to strengthen 17 district hospitals with additional equipment and it would take action to appoint additional manpower to utilise the equipment installed.

Taking cues from the aforesaid PA, a compliance audit of the Department of Health and Family Welfare Services for the year 2017-18 was undertaken, focusing on utilisation and availability of services in the district and taluk hospitals with emphasis on ICU. On scrutiny of records of 10 district hospitals, 22 taluk hospitals and four general hospitals in 12 test-checked districts[59] (Amongst these, 3 district hospitals, 3 taluk hospitals and 1 General hospital pertained to the PA period), besides conducting joint inspection of the facilities, we noticed the following:

[58] ICU is a dedicated unit for critically ill patients who require invasive life support, high levels of medical and nursing care and complex treatment.

[59] Bengaluru Rural, Bengaluru Urban, Chikkaballapura, Chikkamagaluru, Chitradurga, Dharwad, Hassan, Kalaburagi, Kolar, Mysuru, Tumakuru and Udupi.

1. Unfruitful expenditure on establishment of Intensive Care Units

In accordance with the budget speech of the Hon'ble Chief Minister, the State Government approved (November 2015) establishment of ICUs in two district[60] and 25 taluk hospitals. The need assessment committee under the chairmanship of the Deputy Director (Health and Family) identified (December 2015) 14 items and their quantity for establishing an ICU. The Committee also recommended for strengthening the ICUs in the existing 19 district hospitals. Accordingly, tenders were invited (August 2016) for procurement of ICU equipment to 46 hospitals (21 district and 25 taluk) estimated to cost ₹20.08 crore. Consequent on the Government deciding (October 2016) to establish ICUs in all the taluk hospitals, the tender was amended (December 2016) through a corrigendum to procure equipment to 167 hospitals (21 district and 146 taluk) at an estimated cost of ₹37.46 crore. The details of requirement as per the Committee and actual procurement are detailed in **Appendix 3.18**.

Analysis of the actual procurement revealed that

(i) As against the assessment of 4 ICU cots, 4 multipara monitors and 2 ventilators for each hospital, the State Government had procured 3 cots, 2 monitors and 1 ventilator respectively for all the taluk hospitals.

(ii) The additional 121 taluk hospitals identified subsequently were not supplied with 100 mA portable X-ray machine, high flow nasal cannula therapy (C-pap) equipment, infusion pump and emergency trolley. The joint inspection of a few hospitals confirmed this fact. It was further observed that the amended estimated cost of ₹37.46 crore did not include these items despite being fully aware of the fact that such equipment are considered to be the mandatory component of setting up an ICU, which has also been stipulated in the Guidelines issued (2007) by the Indian Society of Critical Care Medicine.

(iii) The two district hospitals, out of 21 identified for establishment of new ICU were not supplied with ICU cots, multipara monitors, ventilators, defibrillators, ECG machine, suction apparatus and crash carts. As a result, the ICUs could not be established in these hospitals. The District Surgeon, district hospital, Ramanagara confirmed (April 2020) that all equipment was not supplied initially and stated that the ICU cots and ventilators were supplied in October 2018 and April 2020 respectively. He further stated that in view of the limited supply of equipment (valuing ₹17.84 lakh) and absence of trained manpower, the ICU could not be made fully functional. The district hospital, Yadgir stated (April 2020) that ICU equipment was received only during April 2020 after which the ICU started functioning effective from 10 April 2020.

(iv) In the existing 19 district hospitals where ICUs were already in place, 11 crash carts were procured in excess of the initial assessment/requirement.

[60] Ramanagara and Yadgir.

(v) None of the hospitals were provided with Air conditioners and syringe pumps under this tender. This was because there were no bidders for Air conditioners and the technical bids of all the bidders who quoted for syringe pumps were rejected. Interestingly, the Government decided to procure these two items in excess of the assessment. The hospitals were supplied with syringe pumps only during November to December 2017 and Air conditioners were not supplied so far.

(vi) Joint verification revealed that ICUs established at a cost of ₹80.87 lakh in five[61] of the test-checked taluk hospitals were not functional. The hospitals attributed lack of doctors, trained staff and other equipment required to make the ICUs fully functional.

(vii) The equipment was supplied between the period April 2017 and September 2017 and carried a warranty of three years from the date of supply. Since treatment of patients depends on the results generated by the medical equipment, the proper and continuous utilisation of these equipment needs to be ensured. Further, any problems or defects identified during the warranty period would have been rectified by the supplier/manufacturer. Non-utilisation would render the equipment remaining idle and also lead to expenditure on defect rectification if any equipment malfunctions on later use.

Evidently, these hospitals could not provide critical care to the needy patients defeating the very purpose of setting up of ICUs. Non-supply of the equipment to all the hospitals, as assessed, resulted not only in non-achievement of the objective of the Government to establish ICUs in all district and taluk hospitals but rendered the expenditure incurred largely unfruitful.

2. Idle equipment

Apart from the above, audit noticed idling of various other equipment such as blood component segregation unit, telemedicine equipment, ultra sound scanners *etc.*, valuing ₹1.32 crore in six test-checked hospitals (including one district hospital in Chikkamagaluru). This was due to non-availability of trained doctors and technicians, non-commissioning of equipment *etc.*, as detailed in **Appendix 3.19**. The non-utilisation of these equipment resulted in non-availability of clinical/diagnostic services to the patients.

Though Government assured (November 2015) to provide essential equipment and necessary manpower to hospitals following the earlier audit, there was no improvement in the situation as many hospitals lacked clinical and diagnostic services.

The State Government replied (May 2020) that it was proposed to have a 3 bed ICU with one ventilator in view of the outbreak of H1N1 and dengue which required ventilator support as maintenance for patients after stabilisation at higher hospitals. It further stated that all equipment had been

[61] General Hospitals - Bangarapet (₹16.71 lakh), Channarayapatna (₹11.78 lakh), Mulbagal (₹12.76 lakh) and Nanjangud (₹18.42 lakh); District Hospital, Dharwad (₹21.20 lakh).

installed at taluk hospitals and efforts have been made to engage requisite manpower on contract basis. The manpower shortage would also be addressed as the Finance Department had permitted the Department to recruit about 300 GDMOs.

The reply cannot be accepted as the justification given was more of an afterthought and the actual justification for establishment of ICU in the additional 121 taluk hospitals was recorded as "Generally 2-5 *per cent* of total medical and surgical patients in a general hospital are critically ill, who require highly skilled lifesaving medical and nursing care with highly specialized staff and equipment. Therefore, it is decided to establish ICU units in all taluk hospitals with ventilators." Further there was no mention of the epidemic outbreak either in the Government order approving establishment of ICUs in all taluk hospitals or in the records produced to audit. The fact, however, remains that the ICUs were not fully functional in few of the hospitals as observed by audit.

It is recommended that the Government take adequate measures to address the shortcomings pointed out and ensure that ICUs are made fully functional and equipment is put to use to benefit patients to the maximum extent.

Department of Collegiate Education

3.7 Exemption of fee concession not extended to girl students of Government aided private colleges

Non-implementation of the Government order by the Department of Collegiate Education resulted in collection of ₹9.68 crore of tuition and laboratory fee by the Government aided private colleges from the eligible girl students who were exempted from paying it.

To encourage higher education among girl students, the Government of Karnataka extended the exemption of tuition and laboratory fees for all girl students studying in Government Aided Private Colleges (aided colleges) from the academic year 2014-15. This exemption was already available to the girl students studying in Government Colleges from the academic year 2007-08. As per the Government Order (June 2014), the Government would reimburse the fee so exempted to the aided colleges subject to the conditions that (i) the girl students should have passed all the exams in the previous semester / year and (ii) should not have availed scholarship from any other sources. This implied that while the first year girl students were eligible for exemption, the girl students studying in second and third years were eligible subject to the condition that they should have passed all the exams of first and second year respectively. An amount of ₹25 crore was also sanctioned during the year 2014-15 for the above purpose.

On scrutiny of records/information furnished by the Department of Collegiate Education and by 123 out of 319 aided colleges during compliance audit of Higher Education (2017-18), we noticed that during the period 2014-15 to 2018-19, the aided colleges had collected both tuition and laboratory fees from

Appendix 3.18

(Reference: Paragraph 3.6/Page 87)

Statement showing the details of assessment and actual procurement of ICU equipment

Sl. No.	Name of the equipment	Quantity to be procured as per original tender					Quantity to be procured as per revised tender					Actual quantity procured
		No. of hospitals 25TH+ 2DH	Quantity assessed per hospital	Quantity for 27 hospitals	Quantity assessed for 19 DH	Total quantity	No. of hospitals 146TH+ 2DH	Quantity tendered per hospital	Quantity for TH hospitals	Quantity assessed for 19 DH	Total quantity	
1	2	3	4	5 (3*4)	6	7 (5+6)	8	9	10 (8*9)	11	12 (10+11)	13
1	ICU Cots	27	4	108	58	166	146	3	438	58	496	496
2	Multipara monitors	27	4	108	66	174	146	2	292	66	358	358
3	Ventilators	27	2	54	19	73	146	1	146	19	165	165
4	High flow nasal cannula therapy (C-pap)	27	2	54	16	70	27	2	54	16	70	70
5	Infusion pump	27	2	54	34	88	27	2	54	34	88	88
6	Suction apparatus	27	1	27	19	46	146	1	146	19	165	165
7	Defibrillator	27	1	27	1	28	146	1	146	1	147	147
8	Blood Gas Analyser	27	1	27	20	47	27	1	27	20	47	47
9	Crash cart	27	1	27	8	35	146	1	146	19	165	165
10	ECG Machine	27	1	27	19	46	146	1	146	19	165	165
11	100mA portable X-ray	27	1	27	19	46	27	1	27	19	46	46
12	Emergency trolley	27	1	27	19	46	27	1	27	19	46	46
13	Syringe pump*	27	2	54	59	113	146	3	438	59	497	0
14	AC 1.5 Ton*	27	2	54	32	86	146	4	584	32	616	0

* There were no bidders for Air conditioners and the technical bids of all the bidders who quoted for syringe pumps were rejected. Hence were not procured.

Source: Information furnished by the Department of Health and Family Welfare

Gold colour indicates comparison between assessed quantity and quantity procured per hospital

Pink colour indicates excess procurement than initial assessment/requirement

Green colour indicates non-procurement of equipment for 2 district hospitals

Orange colour indicates non-procurement of equipment for 121 taluk hospitals

Appendix 3.19

(Reference: Paragraph 3.6/Page 88)

Equipment lying idle due to non-installation / lack of trained manpower

Sl. No.	Hospital	Name of the equipment	Total cost (₹ in lakh)	Reason
1	District Hospital, Chikkamagaluru	Blood Component Segregation Unit	45.10	Though main equipment was supplied during April 2017 to July 2017, some of the parts of the equipment was yet to be supplied. License from Drug Controller to segregate the blood is yet to be received (June 2018). Hospital lacked technician to operate the equipment.
2		ICU ventilator	28.82	Non-availability of trained doctors and staff.
3	District Hospital Chikkamagaluru, Taluk Hospitals – Navalgund and Channarayapatna	Ultra sound scanners	23.80	Due to non-availability of radiologist, ultra sound scanners supplied during October 2017 yet to be installed.
4	Taluk Hospital, Srinivasapura	Ultra sound Doppler and Echo equipment	17.95	Due to non-availability of sinologist and technician, the equipment's supplied during February 2017 yet to be installed.
5	District Hospital Chikkamagaluru, Dharwad and General Hospital, Jayanagara	Malaria Detection Equipment	16.50	Non-commissioning of the equipment by the supplier.
	Total		**132.17**	
6	Taluk Hospitals – Mulbagal, Karkala, Kalaghatgi and Kadur	Telemedicine equipment	NA	Non- availability of Karnataka State Wide Area Network connectivity, sound proof enclosures and technicians.

Source: Information furnished by test-checked hospitals and joint inspection findings