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अखिल भारतीय आयुर्विज्ञान संस्थान
ALL INDIA INSTITUTE OF MEDICAL SCIENCES
भंडार अनुभाग (निका) / Store Section (D.O.)
असारीनगर, नई दिल्ली- 110029
ANSARI NAGAR, NEW DELHI- 110029

F.No.1/SO(DO)/Misc./Circular/2024-25

Dated: 19.12.2024

E.F.No. 3272414

CIRCULAR

Subject:- Implementation of Approved report on "modalities for procurement and Maintenance of Medical Equipment" at AIIMS, New Delhi - Reg.

Undersigned is directed to convey the approval of competent authority towards the implementation of office order no. Z-28016/35/2024-PMSSY-IV-Part (1)(8288538) dated:- 30.08.2024, on above cited subject issued by the PMSSY- IV Section, MoHF&W, GOI, at AIIMS, New Delhi till issuance of any further amendments/orders in this regard.

(Enclosure - As above)

Faculty In-charge
(Procurement)

Distribution (With a request to also circulate it to all officials under their control)

1. Dean's (Academic/Research)
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3. All Chief of Centers/All Head of Departments.
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19/12/24

Z-28016/35/2024-PMSSY-IV-Part(1) (8288538)
Government of India
Ministry of Health & Family Welfare
(PMSSY-IV Section)

Room No. 745-A, Nirman Bhawan, New Delhi
Dated the 30-08-2024

Office Order

Subject : Circulation of Approved Report on Modalities for Procurement and Maintenance of Medical Equipment– reg.

Please find enclosed herewith the Report on Modalities for Procurement and Maintenance of Medical Equipment as submitted by the Committee set up by the MoHFW under the Chairpersonship of Dr. Atul Goel, DGHS, MoHFW, Gol.

2. The Committee in its report has made recommendations on the followings:-
 - i. Duration of Warranty and CMC of Medical Equipment
 - ii. Purchase of Consumables
 - iii. Operation and Maintenance of Medical Equipment by a single agency
3. The Report has been approved by Secretary (HFW).
4. in view of the above All AIIMS/ INIs/ Institutes/ Hospitals of the Ministry are advised adhere to the above guidelines while procuring medical equipment / consumables in their respective institutes/ hospitals .
5. Further award of the work of Operation and Maintenance of Medical Equipment should be taken up in accordance with provisions of GFR through tendering process so as to get competitive rates.

Signed by Arun Kumar
Biswas
Date: 30-08-2024 11:04:02

(Arun Kumar Biswas)
Under Secretary to the Government of India

Encl (1):

Report on Modalities for Procurement and Maintenance of Medical Equipment

To

- i. All Additional Secretaries/ Joint Secretaries, MoHFW – with a request to

circulate the above Report/ Guidelines to all the Institutes/ Hospitals/ Autonomous Bodies under their administrative control, for compliance.

ii. Director General of Health Services, MoHFW, GoI

Copy to :

1. Director, AIIMS New Delhi
2. Director, PGIMER, Chandigarh,
3. Director, JIPMER, Puducherry
4. Director, NIMHNAS, Bengaluru
5. The Directors/ Executive Directors of new AIIMS under PMSSY
6. The Directors of Central Government Hospitals in Delhi/ North East Hospitals
7. CEO, HITES (via email at ceo@hllhites.com)

Copy for information to :

1. PSO to Secretary(HFW)
2. PPS to Joint Secretary (PMSSY)
3. PS to Joint Director (PMSSY-IV)

Copy to :

1. IT Consultant (MNM) - (with request to upload the Report on the website/ portal of PMSSY)
2. E-Health Section - (with request to upload the Report on the website of the Ministry)



Government of India
Ministry of Health and Family Welfare

**REPORT OF COMMITTEE ON MODALITIES
FOR PROCUREMENT AND MAINTENANCE OF
MEDICAL EQUIPMENT**

INDEX

Sr. No.	CONTENTS	Page
1.	Introduction	3-4
1.1	Constitution of Committee	
	Composition of the Committee	
	Term of Reference of the Committee	
	Deliberations of the Committee	
2.	DURATION OF WARRANTY AND CMC OF MEDICAL EQUIPMENT	5-9
2.1	Advantages & Disadvantages of Existing System	
2.3	Alterative System	
2.3	Cost Benefit Analysis	
2.4	Case Study	
2.5	Recommendations of The Committee	
3.	PURCHASE OF CONSUMABLES	10-11
3.1	Non-Proprietary Consumable	
3.2	Proprietary Consumable	
3.3	Recommendations of The Committee	
4.	OPERATION AND MAINTENANCE OF MEDICAL EQUIPMENT	12-15
4.1	Challenges in existing System	
4.2	Feasibility Centralized System	
4.3	Benefits of centralized system	
4.4	Challenges of centralized System	
4.5	Examination of West Bengal Model	
4.6	Recommendations of The Committee	
4.7	Summary of Recommendations of the Committee	
	Annexure I: OM for Constitution of the Committee	16-17
	Annexure II: Minutes of Meeting of the Committee	18-19
	Annexure III: Life Cycle of DPR Items	20-35
	Annexure IV: Feedback sought for West Bengal Model	36

1. INTRODUCTION

A two-day workshop was held on 15.03.2024 and 16.03.2024 for all AIIMS, INIs and Central Government Hospitals and North East institutes for sharing best practices and discussion on issues related to various areas such as- Patient Care and Clinical Services, Teaching- Learning process, Procurement and Governance matters. Experts made several presentations from various institutes- about their best practices before the forum, which was followed by extensive discussions. As per Record of Discussion of two days' Workshop, eight Committees with specific mandates & explicit Term of References (ToR) were constituted.

1.1. The Committee on Modalities for Procurement and Maintenance of Medical Equipment was constituted to look into various technical & administrative issues related to procurement & maintenance of Medical Equipment(s) in premier hospitals/intuitions of the country. The composition & ToR of the Committee are as follow;

i. The composition of the Committee is as follow;

1. Dr. (Prof.) Atul Goel, Director General Health Services - Chairperson
2. Dr. Saurabh Varshney, Executive Director AIIMS, Deoghar
3. Dr. L.N. Dorairajan, Medical Superintendent JIPMER, Puducherry
4. Sh. Devender Pratap Singh, Chief Executive Officer, HITES

ii. Terms of Reference of the Committee;

- a. To recommend whether the present system of 5 years of warranty +5 years of Comprehensive Maintenance Contract for major equipment should be substituted with 2 years of Warranty +5 years of CMC or 2 years of Warranty +8 years of CMC to reduce the outgo of capital expenditure on major equipment.
- b. To recommend the duration for which the price of consumables should be fixed where such consumables are a propriety item for use in a particular machine.
- c. To suggest mechanism of Operation and Maintenance of all Equipment(s) (except high end radiology equipment) by a single Agency to avoid coordination issues with multiple vendors.

iii. The Committees shall have the options of examining any other related issues, which has not been mentioned in the ToR, but deemed fit by the Committees for inclusion in its reports. The Committees may include any other member(s) as per the requirement if necessary.

iv. The Committees are required to submit their reports to the Ministry within a period of one month.

1.2. To deliberate the assigned issues, the two meetings of **Committee on Modalities for Procurement and Maintenance of Medical Equipment** were held on **03.05.2024** (hybrid mode) & **05.07.2024** (hybrid mode), under the Chairmanship of Director General Health Services (DGHS).

2. DURATION OF WARRANTY AND CMC OF MEDICAL EQUIPMENT

The Committee deliberated various combination of Warranty and Comprehensive Maintenance Contract (CMC) period for various medical equipment(s) in present scenarios. Each combination of warranty period and CMC period has its own advantages and disadvantages subject to effective life cycle of the medical equipment(s). The Committee was of the view, in general, the high-end medical equipment(s), which has longer effective life cycle (more than 10 years) & of high value may have slightly longer warranty period as compared to the low to medium-end medical equipment(s), which has shorter effective life cycle & of low value. The medical equipment, which have shorter span of life (less than three years), may have warranty period of one year and Annual Maintenance Contract (AMC) for subsequent years and need not CMC.

2.1 The Committee analyzed advantages & disadvantages of existing system of 5 years warranty and 5 years CMC for medical equipment;

2.1.1 Advantage:

i) In most of the procurement process, dealers participate on behalf of manufacturers. Keeping 5-year warranty dissuades fly by night operators and bidder ensure good quality equipment to sustain 5 years warranty.

ii) Since warranty expenses are part of capital/asset value, it is administrative convenient for institutions to get approvals in one go, whereas CMC is part of recurring expenses, which require regular/annual financial & administrative approval. Generally, Government provides funds for buying capital/asset while it is sometime difficult for the institute to obtain fund/budget for maintenance. Consequently longer duration of warranty helps reduce the pressure on the running expense of the institute.

iii) As per provisions of taxation, CMC comes under services, which attracts higher rate of GST as compare to goods, wherein warranties are covered.

iv) In newly created institutes, like AIIMS under PMSSY, sometime construction of building infrastructure may be lagging behind and medical equipment are procured on time, shorter warranty period may be lapsed before commissioning of medical equipment.

2.1.2 Disadvantage:

- i) **Higher capital cost:** Longer warranties add significantly to the upfront cost of the equipment. Significant amount of budget may be utilized for buying capital goods/assets creation, therefore, fewer capital goods/assets can be created within the available budget.
- ii) **Higher custom duty:** In case of imported goods, the custom duty is calculated on the initial purchase value, which results in payment of higher custom duty. This need not to be paid when CMC is taken in place of additional warranty added/built-in to the equipment cost.
- iii) **Dependency on Manufacturer:** In case of longer warranty period, the maintenance cost has already been built- in to the cost of the equipment and is already paid to the supplier. The users are forced to depend on the manufacturer's service network, which might not always be the fastest or most convenient. There is a risk, particularly, with new manufactures, the quality of the service support may be poor.
- iv). **Technology Change:** The rapid technological changes are also happening in the medical field. An extended 5 years warranty and 5 years CMC may results in an equipment with old technology and institutes are enforced to use these during the extended warranty period. Manufactures generally avoid upgradation of hardware & software during warranty period.

2.2 The Committee examined 2 years Warranty and 8 years plus CMC for Medical Equipment having longer period of effective life cycle (10 or more years). The following advantages are associated with above combination;

- i. **Lower capital cost:** Capital cost of the equipment will be significantly reduced. More number of equipment can be procured from the capital budget.
- ii. **Lower custom duty:** In case of imported goods, the custom duty is calculated on the initial purchase cost, which results in payment of lower custom duty.
- iii. **More competition:** The institute has flexibility to opt for third party maintenance in case of poor service response by the bidder or the manufacturer.
- iv. **Latest Technology:** The rapid technological advancements are also happening in the medical field. The equipment can be upgraded with latest technology including hardware and software.

2.3 Cost benefit analysis: HITES carried out a cost benefit analysis for 5 years Warranty & 5 years CMC vis-à-vis 2 years Warranty & 8 years CMC for a high end medical equipment;

(A). Equipment with two years warranty and eight years CMC

Sr. No.	Name of the Particulars	Price in INR (Lakhs)
A1	Equipment with one year warranty without any custom duty	100.00
B1	Cost of additional Warranty/ CMC per year @5% of Base Price	5.00
C1	Equipment with two year warranty without any custom duty (A1+B1)	105.00
D1	Custom duty & clearance charges (@26.32%)	27.64
E1	Total equipment price with two year warranty Custom duty & clearance charges (C1+D1)	132.64
F1	CMC charges for next 8 years	53.0544
G1	Total equipment price with two year warranty & 8 year CMC	185.69
H1	BG value (10%)	13.26

(B). Equipment with five years warranty and five year CMC

Sr. No.	Name of the Particulars	Price in INR (Lakhs)
A2	Equipment with one year warranty without any custom duty	100.00
B2	Cost of additional 4 years Warranty/ CMC @5% per year of Base Price	20.00
C2	Equipment with 5 years warranty without any custom duty (A2+B2)	120.00
D2	Custom duty & clearance charges (@26.32%)	31.58
E2	Total equipment price with 5 years warranty Custom duty & clearance charges (C2+D2)	151.58
F2	CMC charges for next 5 years	37.896
G2	Total equipment price with 5 years warranty & 5 year CMC	189.48
H2	BG value (10%)	15.16
I2	Interest on Difference in BG charges for additional 3 years that will be integrated by the supplier on the initial price (@3% per year)	0.17
J2	Upfront cost in CMC paid by the institute in case of 5 year warranty compared to 2 year warranty (E2-E1)	18.95
K2	Interest on upfront payment on CMC charges integrated by vendor @ 8% per year on equipment cost	4.54752
	Total cost of equipment (G2+I2+K2)	194.20

2.4 Case Study: MRI 1.5T, HITES with 5 Year warranty VS KMSCL with 3 Year Warranty

Make: Philips, Model: Ambition X

KERALA MEDICAL SERVICES CORPORATION LTD (KMSCL)		
SN	Name of the Particulars	Price in INR (Lakhs)
A1	Equipment with 3 year warranty (Incl. GST & custom duty)	155,501,190
B1	Turnkey works 1500 Sq Ft (@ 4500/Sqft)	6,750,000
C1	Equipment with three year warranty (Incl. GST & custom duty)	162,251,190
D1	CMC price for next 7 years	44,450,496
E1	Total equipment price with three year warranty & 7 year CMC	206,701,686

HITES		
SN	Name of the Particulars	Price in INR (Lakhs)
A2	Equipment with 5 Year Warranty (Incl. GST, custom duty & Turnkey works)	193,383,625
B2	CMC charges for next 5 years	48,345,906
C2	Total equipment price with 5 years warranty & 5 year CMC	241,729,531

Percentage difference in Capital Equipment Price $[(A2-C1)/C1*100]$: 19%

Percentage difference in Lifecycle Cost (10 years) $[(C2-E1)/E1*100]$: 17%

2.5 Recommendations of the Committee;

- i. **A list of medical equipment with their estimated life-cycles period to be prepared. Based on estimated life cycle the combination of Warranty & CMC period may be decided.**
- ii. **For equipment with estimated cost up to 5 lakhs, the committee recommends to keep warranty of one year or as per GeM contract of supplier or OEM. The institutions can decide CMC/AMC, individually, as per their convenience.**

- iii. For Medical equipment with effective life cycle more than 2 years & less than 10 years and estimated cost more than 5 lakhs, the Committee recommends 2 years' warranty and CMC for the remaining effective life cycle period to reduce initial outgo of capital expenditure
- iv. For high-end medical equipment with effective life cycle of 10 or more years, the Committee recommends for 2 years' warranty and 8 years CMC to be taken subsequently.

3. PURCHASE OF CONSUMABLES:

The committee was of the opinion that it is difficult to calculate patient load and exact consumable requirement, particularly for a new Institute/hospital.

3.1 Non-Proprietary Consumable: To the extent possible it should be clearly spelled out and must be accepted by the bidder for the use of third party accessories at the discretion of the buyer in such cases where these are available, without any threat of invalidation of warranty or CMC. Non-proprietary consumables may be purchased from the open market. Purchasing consumables from the open market allows healthcare providers to benefit from competitive pricing. This competition drives down prices and institute can purchase high-quality consumables at lower costs. Freezing rates can lead to price fixation, where the price remains constant regardless of market fluctuations. The open market is dynamic and constantly evolving, with new and improved products are being introduced regularly. By purchasing non-proprietary consumables from the open market, institute can access the latest innovations and advancements in medical technology.

3.2 Proprietary Consumable: When consumables are critical for the functioning of the equipment & proprietary nature and the annual expenditure on the consumables are likely to be a relatively small portion of the annual expenditure as compare to the cost of the capital goods and the CMC, like, surgical Robot instruments and accessories, ventilator oxygen sensors and expiratory cassettes, batteries of multi-parameter monitors, defibrillators, and ventilators, then it is desirable that the price of proprietary consumables are frozen at the time of initial purchase.

Advantages:

- i. Life cycle cost comparison becomes more rational.
- ii. The risk of arbitrary escalation of prices by vendor may be reduced.
- iii. Audit queries seeking price reasonability justification may be minimized as the price of the consumables have been determined by a competitive bidding process.

Disadvantages:

- i. Suppliers may quote a higher price for consumables than the current market price to cover market price escalation risks (mitigation: clause for optional predetermined annual escalation built into contract).
- ii. Prices of consumables may fall (mitigation: have a fall clause).
- iii. Need to monitor market prices to enforce the fall clause.
- iv. Purchaser may buy consumables far in excess of estimates especially for distant future.
- v. Supplier may default on supplying the accessories in cases where the estimated quantity of procurement is far higher than the actually ordered quantities making the supply of the consumables financially unviable to the supplier.
- vi. Supplier may default on supplying the accessories at the stated price, especially in more distant future when market scenario may have changed making supply of accessories unviable. A clause for readjustment of price may be incorporated in case price of the accessories actually increase due to unforeseen dramatic verifiable changes in market circumstances in distant future (say after five years).

3.3 Recommendations of the Committee:

- i. **The pricing of consumable may be decided on basis of Centralized or Individual Rate Contract subject to life cycle of medical equipment.**
- ii. **For Proprietary consumables, committee recommends that the cost of consumables should be included with cost of the equipment for initial two years and the rate of consumable should be freeze for subsequent 3 years at the time of purchase.**
- iii. **OPEX Model should be considered for medical equipment running on proprietary consumables.**
- iv. **For Non-Proprietary consumables, committee recommends that healthcare Institution may buy from open market to avail benefits of competitive pricing and innovations & advancements in medical technology.**

4. OPERATION AND MAINTENANCE OF MEDICAL EQUIPMENT BY A SINGLE AGENCY

The Committee deliberated the advantages & disadvantages of existing systems of operation & maintenance of Medical Equipment. The equipment, which are under warranty & CMC are, generally, maintained by concerned supplier/manufacture of the equipment. The equipment, which are either out of warranty period or not covered under CMC, are maintained by institution either on call basis or under AMC. In both cases, the responsibility of maintenance & operations of the equipment remain with individual department /institution.

4.1 Challenges in existing System:

- i. Non-availability of Real-Time status of operation and performance of equipment, leading to delays in maintenance and repairs.
- ii. Increasing capital expenditure for replacing equipment due to lack of efficient maintenance and management practices.
- iii. Significant expenses incurred for regular maintenance and repairs, often due to the use of multiple vendors and lack of standardization.
- iv. Long turnaround times for equipment repairs, affecting operational efficiency and patient care.
- v. Challenges in sourcing and procuring spare parts promptly, leading to prolonged equipment downtime.
- vi. Difficulty in obtaining service support for equipment nearing or at the end of its operational life.
- vii. Difficulty in tracing OEM Authorized Vendors.
- viii. Challenges in meeting and maintaining compliance with various regulatory standards and accreditation requirements (NABH, NABL, AERB, etc.).
- ix. Complications arising from managing and coordinating with multiple vendors for a single scope of work, leading to inefficiencies and inconsistencies.
- x. In absence of a unified system for monitoring and tracking of equipment breakdowns across all institutes, leading to fragmented and inefficient maintenance efforts.

- xi. Insufficient training and awareness among staff regarding the safe and optimal use of medical equipment, resulting in misuse and frequent breakdowns.

4.2 The Committee, further, deliberated the feasibility of engaging single agency to develop, dashboard based, centralized system for providing real-time basis information on status of operation & maintenance of Medical Equipment across the institutions/Hospitals. The centralized system may enable better monitoring and management of all Central Government Institutes/Hospitals, encompassing the available capital assets and their running, operation, and maintenance status of medical equipment.

4.3 Benefits of centralized system:

- i. Centralized Coordination by single agency with dashboard access by individual institute will ensure maintaining inventories of available assets and maintenance activities in effectively and efficiently manner.
- ii. Comprehensive Dashboard: Customizable digital MIS dashboard, both locally and centrally.
- iii. Real-time Inventory Visibility & Verification: Instant access to inventory status.
- iv. Complaint Management Tracking & Updates: Real-time updates on complaint status.
- v. Ease of Complaint Logging: Multiple platforms for logging complaints, including IVRS, app, and QR code.
- vi. Auto Scheduling of PMS, Calibration & QA Work: Automatic scheduling as per regulations, aiding in NABH accreditation.
- vii. E-Repository: All statutory documents available at the click of a button.
- viii. Condemnation & RBER Recommendations & Records: Digital records and recommendations.
- ix. User Training Scheduler & Records: Scheduled training sessions with records. Training important staff like technicians for handling critical equipment and preventive care will increase equipment lifecycle.
- x. User Training Feedback: Feedback collection for each service.

4.4 Challenges of centralized System:

- i. Capability of single agency in managing such a large-scale contract remains questionable.
- ii. The effective life cycle of medical equipment varies from make to make and institute to institute.
- iii. Upgradation of medical equipment to be done separately by the institute.

4.5 The Committee also examined the model of Health & Family Welfare Department, Government of West Bengal, which engaged HITES for comprehensive maintenance of Bio-Medical Equipment to all the Hospitals and Healthcare units including Medical Colleges & Hospitals, District hospitals, Sub Divisional Hospitals, State General Hospitals, Block Primary Health Centres, Rural hospitals, Primary Health Centres, Sub Centres, Urban Primary Health Centre and other Health Units. In this regard, a formal feedback has been sought by the Committee from Director, Health Services, Govt of West Bengal.

4.6 Recommendations of the Committee:

- i. **The asset tagging & mapping of the equipment, that is being procured, is mandatory to ensure transparency in the maintenance or tracking downtime of the equipment. Periodic calibration of the all the medical equipment should be part of the operation and maintenance.**
- ii. **In view of lack of technical expertise, initially, in medical Institutions/Hospitals for handling high end radiology equipment, the Committee recommends that OEM should entrusted with maintenance & operation job to ensure accuracy, reliability and safety in medical diagnosis and treatment for at least initial two years.**
- iii. **For all medical equipment, other than high end radiology equipment, the committee recommends, a single agency may be considered for maintenance & operation (along with digital tagging & mapping) to avoid coordination issues with multiple vendors. A pilot project for executing Bio Medical Equipment maintenance service along with digital tagging & mapping of all medical equipment may be taken up in few Central Govt Hospitals/AIIMS/ INIs. Based on the performance of the program outcome, the program may be extended to all central Govt. Institutes.**

4.7: Summary of Recommendations of the Committee

Sl. No.	Term of Reference	Recommendations of the Committee
1	To recommend whether the present system of 5 years of warranty +5 years of Comprehensive Maintenance Contract for major equipment should be substituted with 2 years of Warranty +5 years of CMC or 2 years of Warranty +8 years of CMC to reduce the outgo of capital expenditure on major equipment.	<ul style="list-style-type: none"> i. A list of medical equipment with their estimated life-cycles period to be prepared. Based on estimated life cycle the combination of Warranty & CMC period may be decided. ii. For equipment with estimated cost up to 5 lakhs, the committee recommends to keep warranty of one year or as per GeM contract of supplier or OEM. The institutions can decide CMC/AMC, individually, as per their convenience. iii. For Medical equipment with effective life cycle more than 2 years & less than 10 years and estimated cost more than 5 lakhs, the Committee recommends 2 years' warranty and CMC for the remaining effective life cycle period to reduce initial outgo of capital expenditure iv. For high-end medical equipment with effective life cycle of 10 or more years, the Committee recommends for 2 years' warranty and 8 years CMC to be taken subsequently. .
2	To recommend the duration for which the price of consumables should be fixed where such consumables are a propriety item for use in a particular machine	<ul style="list-style-type: none"> i. The pricing of consumable may be decided on basis of Centralized or Individual Rate Contract subject to life cycle of medical equipment. ii. For Proprietary consumables, committee recommends that the cost of consumables should be included with cost of the equipment for initial two years and the rate of consumable should be freeze for subsequent 3 years at the time of purchase. iii. OPEX Model should be considered for medical equipment running on proprietary consumables. iv. For Non-Proprietary consumables, committee recommends that healthcare Institution may buy from open market to avail benefits of competitive pricing and innovations & advancements in medical technology.
3	To suggest mechanism of Operation and Maintenance of all Equipment(s) (except high end radiology equipment) by a single Agency to avoid coordination issues with multiple vendors	<ul style="list-style-type: none"> i. The asset tagging & mapping of the equipment, that is being procured, is mandatory to ensure transparency in the maintenance or tracking downtime of the equipment. Periodic calibration of the all the medical equipment should be part of the operation and maintenance. ii. In view of lack of technical expertise, initially, in medical Institutions/Hospitals for handling high end radiology equipment, the Committee recommends that OEM should entrusted with maintenance & operation job to ensure accuracy, reliability and safety in medical diagnosis and treatment for at least initial two years. iii. For all medical equipment, other than high end radiology equipment, the committee recommends, a single agency may be considered for maintenance & operation (along with digital tagging & mapping) to avoid coordination issues with multiple vendors. A pilot project for executing Bio Medical Equipment maintenance service along with digital tagging & mapping of all medical equipment may be taken up in few Central Govt Hospitals/AIIMS/ INIs. Based on the performance of the program outcome, the program may be extended to all central Govt. Institutes.

ANNEXURE-I

V-16020/39/2024-INI-I
Government of India
Ministry of Health & Family Welfare
(PMSSY-IV Section)

Room No. 745-A, Nirman Bhawan, New Delhi

Dated the 22 April, 2024

Office Order

Subject : Constitution of Committees for consideration of Action Points and Issues arising from the two-day workshop held on 15.03.2024 and 16.03.2024-reg.

With the approval of Competent Authority, as per the Record of Discussion of the two-day workshop held on 15.03.2024 and 16.03.2024, the following committee on Modalities for Procurement and Maintenance of Medical Equipments is hereby formed with the below mentioned member composition.

Members

1. Dr. Atul Goel, Director General of Health Services - Chairperson
2. Dr. Saurabh Varshney, Executive Director, AIIMS, Deoghar
3. Dr. L N Dorairajan, Medical Superintendent, JIPMER
4. Shri Devender Pratap Singh, CEO, HITES

Terms of References -

- a. To recommend whether the present system of 5 years of warranty +5 years of Comprehensive Maintenance Contract for major equipment should be substituted with 2 years of Warranty +5 years of CMC or 2 years of Warranty +8 years of CMC to reduce the outgo of capital expenditure on major equipment.
- b. To recommend the duration for which the price of consumables should be fixed where such consumables are a propriety item for use in a particular machine.
- c. To suggest mechanism of a Operation and Maintenance of all Equipments (except high end radiology equipment) by a single Agency to avoid coordination issues with multiple vendors

The Committee shall have the option of examining any other related issue which has not been mentioned in the ToRs but deemed fit by the Committee for inclusion in

Copy for reference to member/Chairperson
No. of copy / ToRS No. 3652411
Date / Date 26/4/24

24/5

Mr. Lalit Kumar
DDG - H&F

50-4

its Report. The Committee may include any other member as per the requirement if necessary.

3. The Committee shall submit its report to the Ministry within a period of 1 month.

4. The Office of the chairperson of the Committee will provide secretarial assistance to the Committee.

5. This is issued with the approval of Secretary HFW.



(Dinesh Kumar)
Joint Director, MoHFW
Tele:011-2306 1730

To
All Committee Members

Copy for kind information to :

1. Dr. Atul Goel, DGHS, MoHFW
2. Shri Jaideep Kumar Mishra, AS&FA, MoHFW
3. Ms. V. Hekali Zhimomi, Additional Secretary, MoHFW
4. Ms. Roli Singh, Additional Secretary, MoHFW
5. Ms. Indrani Kaushal, Senior Economic Advisor, MoHFW
6. Dr. Manashvi Kumar Joint Secretary (Hospital/NE)
7. Director (INI)/Director (PMSSY-I&II)/DS (PMSSY-III)/Joint Director (PMSSY-IV) Director (PMSSY-V)/Director (Hospital & NE)

Copy to :

- (i) Director, AIIMS New Delhi/Additional Director, AIIMS, New Delhi
- (ii) Director, PGIMER, Chandigarh, Director, JIPMER, Puducherry
- (iii) The Directors/ Executive Directors of new AIIMS under PMSSY as per list
- (iv) The Directors of Central Government Hospitals/ North East Hospitals as per list

Copy for information to :

1. PSO to Secretary(HFW)
2. PPS to Joint Secretary (PMSSY)

Minutes of Meeting of “Committee on Modalities for Procurement and Maintenance of Medical Equipment” held on 03.05.2024

The first meeting of newly constituted **Committee on Modalities for Procurement and Maintenance of Medical Equipment** was held on **03.05.2024 at 02:30 PM (in hybrid mode) in Room No. 445-A, Nirman Bhawan, New Delhi** under the Chairmanship of Director General Health Services (DGHS) to discuss various technical & administrative issues related to procurement of Medical Equipment(s).

2. As per Term of Reference, the Committee deliberated all three issues in details viz.
 - i. To review present system of 5 years Warranty + 5 years CMC for Medical Equipment.
 - ii. To review the pricing mechanism of consumable
 - iii. To suggest mechanism of operation & maintenance.

3. HITES made a presentation on web based dashboard for tagging, operation, tracking & maintenance of all kind Medical Equipment/Assets of a Medical Institute. HITES also expressed its interest for carrying out a pilot for few Hospitals/Institutes.

4. After details deliberations on above issues; the Committee made following recommendations;
 - i. A comprehensive list of life cycle of all medical equipment for each institute may be prepared.
 - ii. Two years Warranty + 8 years CMC may be considered subject to life cycle of the equipment.
 - iii. The pricing of consumable may be decided on basis of Centralized or Individual Rate Contract subject to life cycle of medical equipment and OPEX Model for medical equipment running on proprietary consumables. For viability of rate contracts, the duration of rate contract may be kept at least two years.
 - iv. A pilot project for tagging of all medical equipment may be considered for five Central Government Hospitals/Institutes (SJH, RMLH, LHMC, RHTC, & NCDC)

and 6 old AIIMS, except AIIMS Delhi, which may, subsequently, be extended to other AIIMS & INIs.

5. The meeting concluded with thanks to Chair.

List of participants

1. Dr. (Prof.) Atul Goel, Director General Health Services - Chairperson
2. Dr. Saurabh Varshney, Executive Director AIIMS, Deoghar
3. Dr. L.N. Dorairajan, Medical Superintendent JIPMER, Puducherry
4. Sh. Devender Pratap Singh, Chief Executive Officer, HITES
5. Sh. Rakesh Kumar, DDG(Stat), Dte.GHS, MoHFW
6. Sh. Prem Prakash, AVP-PCD, HITES
7. Shri. Aneesh V R, SM-BME, HITES
8. Ms. Neha Bansal, M-BME HITES

ANNEXURE-III

Life Cycle of Medical Equipment

TEACHING DEPARTMENT/BLOCK					
DEPARTMENT OF ANATOMY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Cooler / Refrigerator	Anatomy	8 Years	2 Years	6 years
2	Dissection Table - Std	Anatomy	8 Years	2 Years	6 years
3	Dissection table small	Anatomy	8 Years	2 Years	6 years
4	Skeleton Articulated	Anatomy	8 Years	2 Years	6 years
5	Human Bones set disarticulated	Anatomy	8 Years	2 Years	6 years
6	Refrigerated centrifuge	Anatomy	8 Years	2 Years	6 years
7	Deep freezer (-20 deg C)	Anatomy	8 Years	2 Years	6 years
8	Deep freezer (-80 deg C)	Anatomy	8 Years	2 Years	6 years
9	Rotary Microtome	Anatomy	8 Years	2 Years	6 years
10	Dissecting microscope / operating microscope	Anatomy	10 Years	2 Years	6 years
11	Paraffin embedding System	Anatomy	8 Years	2 Years	6 years
DEPARTMENT OF BIOCHEMISTRY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Complete Chromatographic Unit for paper & TLC	Biochemistry	8 Years	2 Years	6 years
2	Complete Electrophoresis apparatus with power supply (Paper, Page, agarose)	Biochemistry	10 Years	2 Years	8 years
3	Densitometer with computer	Biochemistry	8 Years	2 Years	6 years
4	Blood gas analyzer	Biochemistry	10 Years	2 Years	8 years
5	Gradient PCR Machine	Biochemistry	10 Years	2 Years	8 years
6	Real time PCR	Biochemistry	10 Years	2 Years	8 years
7	Chemiluminescence & Gel imaging & analysis system	Biochemistry	10 Years	2 Years	8 years
8	Vertical gel electrophoresis	Biochemistry	10 Years	2 Years	8 years
9	HPLC system	Biochemistry	10 Years	2 Years	8 years
10	Random access medium throughput fully automated chemistry analyzer	Biochemistry	10 Years	2 Years	8 years
11	Elisa reader with washer and shaker	Biochemistry	10 Years	2 Years	8 years
12	Ultra Centrifuge	Biochemistry	8 Years	2 Years	6 years
13	Refrigerated centrifuge	Biochemistry	8 Years	2 Years	6 years
14	Refrigerated Microcentrifuge	Biochemistry	8 Years	2 Years	6 years
15	Nano spectro bio photometer	Biochemistry	10 Years	2 Years	8 years
16	Fluorescent microscope	Biochemistry	10 Years	2 Years	8 years
17	Inverted microscope with PC	Biochemistry	10 Years	2 Years	8 years
18	CO2 incubator	Biochemistry	5 Years	2 Years	3 years
19	Flowcytometer	Biochemistry	10 Years	2 Years	8 years

20	Agarose gel electrophoresis system	Biochemistry	10 Years	2 Years	8 years
21	Vertical deep freezer -20deg	Biochemistry	8 Years	2 Years	6 years
22	Vertical deep freezer -80deg	Biochemistry	8 Years	2 Years	6 years
23	Fully automated chemiluminiscence immunoassay analyzer	Biochemistry	10 Years	2 Years	8 years
24	Microplate multimode reader	Biochemistry	8 Years	2 Years	6 years
25	HPLC based automated analyzer for HbA1c & hemoglobinopathy testing	Biochemistry	10 Years	2 Years	8 years
26	Lyphilizer	Biochemistry	8 Years	2 Years	6 years
27	Western Blot Apparatus with Compatible Power Pack	Biochemistry	8 Years	2 Years	6 years
DEPARTMENT OF PHYSIOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
9	Polygraph four channel	Physiology	8 Years	2 Years	6 years
DEPARTMENT OF MICROBIOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Bio safety cabinet Class II A	Microbiology	8 Years	2 Years	6 years
2	Bio safety cabinet Class II B	Microbiology	8 Years	2 Years	6 years
3	CO2 Incubator	Microbiology	5 Years	2 Years	3 years
4	Deep freezers -20 deg C	Microbiology	8 Years	2 Years	6 years
5	Deep freezers -80°C- Vertical	Microbiology	8 Years	2 Years	6 years
6	Automated continuous monitoring stand alone blood culture system	Microbiology	10 Years	2 Years	8 years
7	Table top refrigerated centrifuged with accessories with adjustable rotor to hold different size tubes	Microbiology	8 Years	2 Years	6 years
8	Walk-in-cooler 4°C (9x8x7 ft)	Microbiology	10 Years	2 Years	8 years
9	Gradient Thermal Cycler with stand alone UPS	Microbiology	10 Years	2 Years	8 years
10	Refrigerated centrifuge	Microbiology	8 Years	2 Years	6 years
11	Gel electrophoresis horizontal with compatible power pack and accessories	Microbiology	10 Years	2 Years	8 years
12	Automated rapid T.B culture and drug sensitivity detection system for 960 samples	Microbiology	10 Years	2 Years	8 years
13	Immunoanalyser (Chemiluminescence based) fully automated with UPS back up	Microbiology	10 Years	2 Years	8 years
14	Anaerobic work station with gas cylinder complete	Microbiology	10 Years	2 Years	8 years
15	Real Time PCR machine with stand alone UPS unit	Microbiology	10 Years	2 Years	8 years
16	Automated bacterial identification system	Microbiology	8 Years	2 Years	6 years
DEPARTMENT OF PHARMACOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Polygraph (Sixteen channel research)	Pharmacology	5 Years	2 Years	3 years

2	Quaternary FHPLC (Fast High Pressure Liquid Chromatography) with Fluorescence + visible and PDA detectors with columns and autosampler (Inclusive Software programme + computer + printer+ Online UPS with at least 1 hr backup)	Pharmacology	10 Years	2 Years	8 years
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DEPARTMENT OF LAB MEDICINE AND PATHOLOGY

Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Electronic Blood Cell Counter with six part differential	Lab Medicine & Pathology	10 Years	2 Years	8 years
2	Fully Automated Coagulometer	Lab Medicine & Pathology	10 Years	2 Years	8 years
3	Automated Urine Analyzer	Lab Medicine & Pathology	10 Years	2 Years	8 years
4	Vacuum Assisted Tissue Processor	Lab Medicine & Pathology	8 Years	2 Years	6 years
5	Embedding Station With Hot & Cold Table & Paraffin Dispenser	Lab Medicine & Pathology	10 Years	2 Years	8 years
6	Grossing Station	Lab Medicine & Pathology	8 Years	2 Years	6 years
7	ESR Analyzer	Lab Medicine & Pathology	10 Years	2 Years	8 years
8	Thalassaemia And Hemoglobinopathy Testing/Screening System	Lab Medicine & Pathology	10 Years	2 Years	8 years
9	Ultra Low Temp Deep Freezer (-20 to -40°C)	Lab Medicine & Pathology	8 Years	2 Years	6 years
10	Flowcytometer	Lab Medicine & Pathology	10 Years	2 Years	8 years
11	IHC Immunostainer	Lab Medicine & Pathology	10 Years	2 Years	8 years
12	Deep Freezer (-80 Deg)	Lab Medicine & Pathology	8 Years	2 Years	6 years
13	Liquid Based Cytology System	Lab Medicine & Pathology	8 Years	2 Years	6 years
14	Automated Clinical Electrophoresis	Lab Medicine & Pathology	10 Years	2 Years	8 years
15	Elisa Reader With Washer	Lab Medicine & Pathology	10 Years	2 Years	8 years
16	Class II, Type A2 Biological Safety Cabinet	Lab Medicine & Pathology	8 Years	2 Years	6 years
17	High Speed Autoclave	Lab Medicine & Pathology	8 Years	2 Years	6 years
18	Automated Coverslipper	Lab Medicine & Pathology	8 Years	2 Years	6 years
19	Automated Slide Stainer	Lab Medicine & Pathology	10 Years	2 Years	8 years
20	Real Time PCR	Lab Medicine & Pathology	10 Years	2 Years	8 years
21	Gel Documentation System	Lab Medicine & Pathology	10 Years	2 Years	8 years

22	Thermal Cycler	Lab Medicine & Pathology	10 Years	2 Years	8 years
23	Refrigerated Table Top Centrifuge	Lab Medicine & Pathology	8 Years	2 Years	6 years
24	Horizontal Gel Electrophoresis System	Lab Medicine & Pathology	10 Years	2 Years	8 years
25	Vertical Electrophoresis System	Lab Medicine & Pathology	10 Years	2 Years	8 years

**DEPARTMENT OF FORENSIC MEDICINE & TOXICOLOGY
INCLUDING MORTUARY**

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Downdraft ventilated Autopsy Table with Integral Sink	Forensic Medicine & Toxicology	8 Years	2 Years	6 years
2	Downdraft ventilated, Stainless steel, Dissecting Bench	Forensic Medicine & Toxicology	8 Years	2 Years	6 years
3	Cadaver lift Conveyor style	Forensic Medicine & Toxicology	10 Years	2 Years	8 years
4	Oscillating Electric Autopsy Saw	Forensic Medicine & Toxicology	10 Years	2 Years	8 years
5	Cadaver/ Autopsy carrier (LP)	Forensic Medicine & Toxicology	8 Years	2 Years	6 years
6	Mobile X- Ray system	Forensic Medicine & Toxicology	10 Years	2 Years	8 years
7	Deep Freezer 200 L (-40 Deg C)	Forensic Medicine & Toxicology	8 Years	2 Years	6 years
8	Mortuary Cooler (four Bodies)	Forensic Medicine & Toxicology	10 Years	2 Years	8 years

SPECIALITY DEPARTMENTS

DEPARTMENT OF GENERAL SURGERY

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Electro hydraulic OT table	Surgery	10 Years	2 Years	8 years
2	Hydraulic OT table	Surgery	10 Years	2 Years	8 years
3	Laparoscope set	Surgery	10 Years	2 Years	8 years
4	Open surgery instrument	Surgery	8 Years	2 Years	6 years
5	ESU	Surgery	10 Years	2 Years	8 years
6	Ultrasonic Cutting & coag.	Surgery	10 Years	2 Years	8 years
7	ESU with vessel sealing	Surgery	10 Years	2 Years	8 years

DEPARTMENT OF GENERAL MEDICINE

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
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1	Multichannel monitor	General Medicine & Immunology	10 Years	2 Years	8 years
2	Defibrillator	General Medicine & Immunology	10 Years	2 Years	8 years
3	Ventilator - Adult	General Medicine & Immunology	10 Years	2 Years	8 years
4	Portable Echocardiography system	General Medicine & Immunology	10 Years	2 Years	8 years

DEPARTMENT OF PEADIATRICS

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Neonatal open care system	Pediatrics	8 Years	2 Years	6 years
2	Ventilator Universal	Pediatrics	10 Years	2 Years	8 years
3	Micromethod bilirubin analyzer	Pediatrics	8 Years	2 Years	6 years
4	Transcutaneous bilirubin analyzer	Pediatrics	8 Years	2 Years	6 years
5	Transport Incubator	Pediatrics	5 Years	2 Years	3 years
6	Bubble CPAP amchine	Pediatrics	10 Years	2 Years	8 years
7	Multiparameter monitor	Pediatrics	10 Years	2 Years	8 years
8	Defibrillator	Pediatrics	10 Years	2 Years	8 years
9	Syringe pump + Docking Station	Pediatrics	10 Years	2 Years	8 years
10	Blood gas analyzer	Pediatrics	10 Years	2 Years	8 years
11	ECHO and USG Machine	Pediatrics	10 Years	2 Years	8 years
12	Point of Care Machine (Trop I, BNP, CPK-MB, CRP)	Pediatrics	10 Years	2 Years	8 years

DEPARTMENT OF ORTHOPEADICS

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Orthopedic table with attachments	Orthopedic	10 Years	2 Years	8 years
2	Cautery Machine with Vessel Sealing	Orthopedic	10 Years	2 Years	8 years
3	Cautery machine	Orthopedic	10 Years	2 Years	8 years
4	C-arm	Orthopedic	10 Years	2 Years	8 years
5	Tourniquet	Orthopedic	8 Years	2 Years	6 years
6	Battery operated drills	Orthopedic	8 Years	2 Years	6 years
7	Plaster saw and equipments	Orthopedic	5 Years	2 Years	3 years
8	Arthroscopy System	Orthopedic	10 Years	2 Years	8 years

DEPARTMENT OF OPHTHALMOLOGY

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Slit lamp	Ophthalmology	10 Years	2 Years	8 years
2	Photo Slit lamp	Ophthalmology	10 Years	2 Years	8 years
3	Non Contact Tonometer with Pachymetry	Ophthalmology	10 Years	2 Years	8 years
4	Automated Perimeter	Ophthalmology	10 Years	2 Years	8 years
5	ND Yag Laser(1064nm)	Ophthalmology	10 Years	2 Years	8 years
6	Ophthalmic Operating Microscope	Ophthalmology	10 Years	2 Years	8 years
7	Digital Fundus Camera	Ophthalmology	10 Years	2 Years	8 years

8	Auto Refractokeratometer	Ophthalmology	10 Years	2 Years	8 years
9	Visual field analyser	Ophthalmology	10 Years	2 Years	8 years
10	Ultrasound (A+B scan)	Ophthalmology	10 Years	2 Years	8 years
11	532nm Green laser Console	Ophthalmology	10 Years	2 Years	8 years
12	OCT	Ophthalmology	10 Years	2 Years	8 years
13	Digital Lensometer	Ophthalmology	10 Years	2 Years	8 years
14	Electro hydraulic Ot table	Ophthalmology	10 Years	2 Years	8 years
15	Phaco Machine	Ophthalmology	10 Years	2 Years	8 years
16	Optical Biometer	Ophthalmology	10 Years	2 Years	8 years
DEPARTMENT OF PSYCHIATRY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Electro Convulsive Therapy (ECT) machine	Psychiatry	10 Years	2 Years	8 years
2	EEG Machine	Psychiatry	10 Years	2 Years	8 years
2	Anesthesia WS Low end	Psychiatry	10 Years	2 Years	8 years
3	Multi Parameter Patient Monitor	Psychiatry	10 Years	2 Years	8 years
4	Computerized Biofeedback Machine	Psychiatry	8 Years	2 Years	6 years
DEPARTMENT OF DERMATOLOGY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	IPL(Intense Pulse Light System)	Dermatology	10 Years	2 Years	8 years
2	Radiofrequency ablation (RFA) machine	Dermatology	10 Years	2 Years	8 years
3	Electro hydraulic Ot table	Dermatology	10 Years	2 Years	8 years
4	Cautery machine	Dermatology	10 Years	2 Years	8 years
DEPARTMENT OF ENT (OTORHYNOLARYNGOLOGY)					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	ENT Operating Microscope	ENT	10 Years	2 Years	8 years
2	Pure tone Audiometer	ENT	10 Years	2 Years	8 years
3	Tympanometer	ENT	10 Years	2 Years	8 years
4	OAE(screening)	ENT	10 Years	2 Years	8 years
5	BERA with ASSR	ENT	10 Years	2 Years	8 years
6	Endoscopic sinus surgery set Xenon head light with camera system	ENT	10 Years	2 Years	8 years
7	Shaver System cum micro drill	ENT	10 Years	2 Years	8 years
8	ENT Workstation	ENT	10 Years	2 Years	8 years
9	Bronchoscopy/Oesophagoscope	ENT	10 Years	2 Years	8 years
10	Flexible rhino-pharyngo-laryngoscope	ENT	10 Years	2 Years	8 years
DEPARTMENT OF OBSTETRICS & GYNECOLOGY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Laparoscopic Surgery Set with Hysteroscope & resectoscope with High Definition Camera & Monitor	Obstetrics & Gynecology	10 Years	2 Years	8 years

2	Portable Ultrasound & Colour Doppler	Obstetrics & Gynecology	10 Years	2 Years	8 years
3	Cardiotocography Machine	Obstetrics & Gynecology	10 Years	2 Years	8 years
4	Gynae OT Table	Obstetrics & Gynecology	10 Years	2 Years	8 years
5	LEEP SYSTEM with Smoke Evacuator & integrated cart	Obstetrics & Gynecology	10 Years	2 Years	8 years
6	Cryo Surgical System	Obstetrics & Gynecology	10 Years	2 Years	8 years
7	Multiparameter Monitor	Obstetrics & Gynecology	10 Years	2 Years	8 years
8	ESU with Vessel Sealing	Obstetrics & Gynecology	10 Years	2 Years	8 years

DEPARTMENT OF PHYSICAL MEDICINE & REHABILITATION (PMR)

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Recumbent Cycle Exerciser	Physiotherapy	8 Years	2 Years	6 years
2	Hip, knee, ankle CPM	Physiotherapy	8 Years	2 Years	6 years
3	Shoulder CPM	Physiotherapy	8 Years	2 Years	6 years
4	Ultrasonic Therapy	Physiotherapy	8 Years	2 Years	6 years
5	Cryotherapy	Physiotherapy	8 Years	2 Years	6 years
6	Short wave diathermy	Physiotherapy	8 Years	2 Years	6 years
7	TENS unit	Physiotherapy	8 Years	2 Years	6 years
8	Lumbar and cervical Traction	Physiotherapy	8 Years	2 Years	6 years
9	Combination therapy unit (Portable)	Physiotherapy	8 Years	2 Years	6 years
10	Robo walk Treadmill with reverse belting and safety harness	Physiotherapy	8 Years	2 Years	6 years
11	MSK-USG with linear transducer	Physiotherapy	10 Years	2 Years	8 years
12	8 channel EMG-NCV	Physiotherapy	10 Years	2 Years	8 years

DEPARTMENT OF PULMONARY MEDICINE

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Body Plethysmograph with Diffusion Study	Pulmonary Medicine	10 Years	2 Years	8 years
2	Multiparameter Monitor	Pulmonary Medicine	10 Years	2 Years	8 years
3	Intensive care ventilators	Pulmonary Medicine	10 Years	2 Years	8 years
4	Video Bronchoscopy system	Pulmonary Medicine	10 Years	2 Years	8 years
5	Polysomnography	Pulmonary Medicine	10 Years	2 Years	8 years
6	Semi Rigid Pleurovideoscope	Pulmonary Medicine	10 Years	2 Years	8 years
7	Electrocautery with argon plasma coagulation	Pulmonary Medicine	10 Years	2 Years	8 years
8	Colour Doppler with all general purpose probes	Pulmonary Medicine	10 Years	2 Years	8 years

9	Cardiopulmonary exercise testing (CPET)	Pulmonary Medicine	10 Years	2 Years	8 years
10	Rigid Thoracoscope (VATS)	Pulmonary Medicine	10 Years	2 Years	8 years
11	Rigid Bonchoscope	Pulmonary Medicine	10 Years	2 Years	8 years
DEPARTMENT OF DENTISTRY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	ADVANCE ELECTRONIC DENTAL CHAIR	DENTISTRY	8 Years	2 Years	6 years
2	DENTAL INTRAORAL X-RAY UNIT	DENTISTRY	10 Years	2 Years	8 years
3	DENTAL DIGITAL RADIOGRAPHY SENSOR SYSTEM WITH SOFTWARE	DENTISTRY	10 Years	2 Years	8 years
4	SURGICAL MICROMOTOR WITH CONSOLE	DENTISTRY	8 Years	2 Years	6 years
5	ORTHOPANTOMOGRAM (OPG) UNIT	DENTISTRY	10 Years	2 Years	8 years
DEPARTMENT OF NURSING					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Patient Care Simulator	Nursing	10 years	2 Years	8 years
2	Patient Care Simulator with Sim Pad	Nursing	10 years	2 Years	8 years
3	BLS Practising Manikin	Nursing	10 years	2 Years	8 years
4	ATLS Practising Manikin	Nursing	10 years	2 Years	8 years
5	Paediatric Simulator	Nursing	10 years	2 Years	8 years
6	Noeonatal Simulator	Nursing	10 years	2 Years	8 years
7	Newborn Resuscitation Manikin	Nursing	8 Years	2 Years	6 years
8	Full body pregnancy simulator	Nursing	10 years	2 Years	8 years
9	Embryonic/Fetal development model	Nursing	8 Years	2 Years	6 years
10	Difficult Airway managment simulator	Nursing	8 Years	2 Years	6 years
11	Physical assessment simulator	Nursing	8 Years	2 Years	6 years
SUPER SPECIALITY DEPARTMENTS					
DEPARTMENT OF CARDIOLOGY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	CATH Lab including All accessories and EP	Cardiology	10 Years	2 Years	8 years
2	Multiparameter Monitor	Cardiology	10 Years	2 Years	8 years
3	Defibrillator	Cardiology	7 Years	2 Years	5 years
4	Ventilator	Cardiology	10 Years	2 Years	8 years
5	Portable coloue doppler with echo probe	Cardiology	10 Years	2 Years	8 years
6	4D Echo Cardiology	Cardiology	10 Years	2 Years	8 years
7	TMT machine	Cardiology	7 Years	2 Years	5 years
8	Ambulatory BP	Cardiology	10 Years	2 Years	8 years

9	Point of Care Device for estimation of Cardiac Biomarkers (CKMB, Troponin, BNP, Myoglobin) and PT-INR	Cardiology	8 Years	2 Years	6 years
10	Temporary Pace Maker Dual Chamber	Cardiology	8 Years	2 Years	6 years
DEPARTMENT OF CTVS					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Electro hydraulic OT Table with all accessories	CTVS	10 Years	2 Years	8 years
2	Heart Lung Machine	CTVS	10 Years	2 Years	8 years
3	Sternal Saw	CTVS	10 Years	2 Years	8 years
4	Electro Surgical Diathermy	CTVS	10 Years	2 Years	8 years
5	Echocardiography 2D machine	CTVS	10 Years	2 Years	8 years
6	Surgical Instrument set for various procedures	CTVS	8 Years	2 Years	6 years
7	IABP Machine	CTVS	10 Years	2 Years	8 years
8	ACT Machine	CTVS	10 Years	2 Years	8 years
9	Surgical Loupe	CTVS	10 Years	2 Years	8 years
10	Operating head lamps with Light source source	CTVS	10 Years	2 Years	8 years
11	Patient warming system	CTVS	10 Years	2 Years	8 years
12	Portable Ventilator	CTVS	10 Years	2 Years	8 years
13	Multiparameter Monitor	CTVS	10 Years	2 Years	8 years
14	Defibrillator with internal paddle	CTVS	10 Years	2 Years	8 years
15	Syringe Infusion Pump	CTVS	10 Years	2 Years	8 years
16	Volumetric Infusion Pump	CTVS	10 Years	2 Years	8 years
17	ECG Machine 12 channel	CTVS	10 Years	2 Years	8 years
18	Arterial Blood gas Analyser	CTVS	10 Years	2 Years	8 years
19	Pacemaker Single Chamber - External	CTVS	10 Years	2 Years	8 years
20	Pacemaker Dual Chamber - External	CTVS	10 Years	2 Years	8 years
21	ETO machine 100 lit	CTVS	10 Years	2 Years	8 years
22	Ventilator Machine	CTVS	10 Years	2 Years	8 years
23	CPAP-BIPAP Machine	CTVS	8 Years	2 Years	6 years
24	Transport Monitor	CTVS	8 Years	2 Years	6 years
25	Cell Saver	CTVS	10 Years	2 Years	8 years
DEPARTMENT OF NEUROLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	8 Ch EMG/NCV/EP Machine	Neurology	10 Years	2 Years	8 years
2	32 channal VEEG	Neurology	10 Years	2 Years	8 years
3	Video Polysomnography	Neurology	10 Years	2 Years	8 years
4	Portable EEG-EMG-NCV Machine	Neurology	10 Years	2 Years	8 years
5	Basic Transcranial Magnetic Stimulator	Neurology	10 Years	2 Years	8 years
6	Transcranial Magnetic Stimulator	Neurology	10 Years	2 Years	8 years

DEPARTMENT OF NEUROSURGERY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Electro hydraulic OT Table with all accessories	Neurosurgery	10 Years	2 Years	8 years
2	ICP Monitor	Neurosurgery	10 Years	2 Years	8 years
3	Neuro Surgical Drill with all attachments.	Neurosurgery	10 Years	2 Years	8 years
4	C-Arm Image Intensifier	Neurosurgery	10 Years	2 Years	8 years
5	Intra Operative Nerve Monitoring	Neurosurgery	10 Years	2 Years	8 years
6	Transcranial Doppler	Neurosurgery	10 Years	2 Years	8 years
7	Neuro Surgical Instruments set	Neurosurgery	8 Years	2 Years	6 years
8	Electro Surgical Diathermy	Neurosurgery	10 Years	2 Years	8 years
9	Multiparameter Monitor	Neurosurgery	10 Years	2 Years	8 years
10	Defibrillator	Neurosurgery	10 Years	2 Years	8 years
11	Operating Microscope	Neurosurgery	10 Years	2 Years	8 years
12	Ultrasonic Aspirator	Neurosurgery	10 Years	2 Years	8 years
13	Cranial Stabilization system	Neurosurgery	8 Years	2 Years	6 years
14	Leyla retractor system	Neurosurgery	8 Years	2 Years	6 years
DEPARTMENT OF GASTROENTEROLOGY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Colour Doppler	Gastroenterology	10 Years	2 Years	8 years
2	Fibro Scan	Gastroenterology	10 Years	2 Years	8 years
3	Endoscopic Ultrasound	Gastroenterology	10 Years	2 Years	8 years
4	Video Endoscopy System with accessories	Gastroenterology	10 Years	2 Years	8 years
5	Fibroscan	Gastroenterology	10 Years	2 Years	8 years
DEPARTMENT OF GASTROENTERO SURGERY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Laparoscopic Surgery set with High Definition camera	Gastroentero surgery	10 Years	2 Years	8 years
2	C-arm with Image Intensifier	Gastroenterology	10 Years	2 Years	8 years
3	Argon Plasma Coagulation System	Gastroenterology	10 Years	2 Years	8 years
4	Cautery Machine	Gastroentero surgery	10 Years	2 Years	8 years
5	OPEN GENERAL SURGERY INSTRUMENTS	Gastroentero surgery	8 Years	2 Years	6 years
6	Ultrasonic cutting and Coagulation device	Gastroentero surgery	10 Years	2 Years	8 years
7	Electro hydraulic OT Table with all accessories	Gastroentero surgery	10 Years	2 Years	8 years
DEPARTMENT OF ENDOCRINOLOGY					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	DEXA SCANNER (BMD)	Endocrinology	10 Years	2 Years	8 years

2	Autoanalyzer immunoassay (chemiluminescence based) - fully automated with UPS back up	Endocrinology	10 Years	2 Years	8 years
3	Deep freezer -20 deg	Endocrinology	8 Years	2 Years	6 years
4	Deep freezer -80 deg	Endocrinology	8 Years	2 Years	6 years
5	Refrigerated centrifuge	Endocrinology	8 Years	2 Years	6 years
6	HPLC based automated analyzer for HbA1C testing	Endocrinology	10 Years	2 Years	8 years
7	Automated Vascular Doppler Recorder for ABI/TBI/Segmental Pressure	Endocrinology	8 Years	2 Years	6 years
8	Neuropathy analyzer-vibration perception threshold + temperature perception threshold	Endocrinology	8 Years	2 Years	6 years
9	Platform pedography system	Endocrinology	10 Years	2 Years	8 years
10	Ambulatory blood pressure monitor	Endocrinology	8 Years	2 Years	6 years
11	Continuous Glucose Monitoring System	Endocrinology	8 Years	2 Years	6 years
12	Blood Gas Analyzer	Endocrinology	10 Years	2 Years	8 years
13	Digital Non-Mydriatic Fundus Camera	Endocrinology	10 Years	2 Years	8 years
DEPARTMENT OF SURGICAL ONCOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Defibrillator with CPR capability	Surgical Oncology	10 Years	2 Years	8 years
2	Multiparameter Monitor	Surgical Oncology	10 Years	2 Years	8 years
3	ESU with vessel sealing	Surgical Oncology	10 Years	2 Years	8 years
5	Operating Table-Electro Hydraulic	Surgical Oncology	8 Years	2 Years	6 years
6	CUSA (Cavitron Ultrasonic Surgical Aspirator)	Surgical Oncology	10 Years	2 Years	8 years
7	Instrument Set	Surgical Oncology	8 Years	2 Years	6 years
DEPARTMENT OF MEDICAL ONCOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Platelet Agitator	Medical Oncology	8 Years	2 Years	6 years
2	Apheresis Machine(Cell separator)	Medical Oncology	10 Years	2 Years	8 years
3	Flow Cytometer	Medical Oncology	8 Years	2 Years	6 years
DEPARTMENT OF RADIATION ONCOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Advanced High Energy Linear Accelerator(LA) System	Radiation Oncology	10 Years	2 Years	8 years
2	Low Energy Linear Accelerator(LA) System	Radiation Oncology	10 Years	2 Years	8 years

3	HDR BRACHYTHERAPY	Radiation Oncology	10 Years	2 Years	8 years
4	CT Simulator System	Radiation Oncology	10 Years	2 Years	8 years
DEPARTMENT OF UROLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Ultrasound machine	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
2	Dual action Ultrasonic plus Pneumatic lithotripter	Urology	5 years	2 Years	3 Years (Buy back after 5 years)
3	Pneumatic lithotripter	Urology	5 years	2 Years	3 Years (Buy back after 5 years)
4	ESWL	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
5	Urodynamic System	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
6	Holmium Laser 120 W	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
7	Tissue Morcellator	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
8	Uretero-rensoscope-Paediatric	Urology	5 years	2 Years	3 Years (Buy back after 5 years)
9	OT Table - Urology	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
10	3-D Laparoscopy set	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
11	C-Arm Image Intensifier Unit	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
12	Robotic system	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
13	Green light Laser system	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
14	Thulium Laser system	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
15	OT Light	Urology	10 years	2 Years	3 Years (Buy back after 5 years)

16	OT Integration System	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
17	HIFU System	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
18	HIVEC System	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
19	HIPEC System	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
20	MRI TRUS Fusion Biopsy system	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
21	Electromagnetic Simulation Chair	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
22	4K Laparoscopy set	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
23	Ultrasonic cutting and Coagulation device	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
24	Airseal Insufflation system	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
25	Vessel Sealing Device	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
26	Electrocautery system	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
27	Electrocautery with argon plasma coagulation	Urology	10 years	2 Years	3 Years (Buy back after 5 years)
28	Videorecording Device	Urology	5 years	2 Years	3 Years (Buy back after 5 years)

DEPARTMENT OF NEPHROLOGY

Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Dialysis Machine	Nephrology	10 Years	2 Years	8 years
2	Automatic PD Cycler	Nephrology	10 Years	2 Years	8 years
3	Dialyser Reprocessor	Nephrology	10 Years	2 Years	8 years
4	RO plant	Nephrology	10 Years	2 Years	8 years
5	CRRT Machine	Nephrology	10 Years	2 Years	8 years
6	Flexible cyto nephroscope high end	Nephrology	10 Years	2 Years	8 years

DEPARTMENT OF PEDIATRIC SURGERY

Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
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1	Surgical Instruments Set Surgery	Pediatrics Surgery	8 Years	2 Years	6 years
2	Electro surgical unit	Pediatrics Surgery	10 Years	2 Years	8 years
3	Pediatric OT table	Pediatrics Surgery	10 Years	2 Years	8 years
4	Pediatric laparoscopy set	Pediatrics Surgery	10 Years	2 Years	8 years
5	Pediatric cystoscope and resectoscope set	Pediatrics Surgery	10 Years	2 Years	8 years
6	Pediatric bronchoscope set	Pediatrics Surgery	10 Years	2 Years	8 years
7	Pediatric rigid Esophagoscope	Pediatrics Surgery	10 Years	2 Years	8 years

DEPARTMENT OF BURN & PLASTIC SURGERY

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	CO2 Laser	Burn & Plastic	10 Years	2 Years	8 years
2	Diode Laser	Burn & Plastic	10 Years	2 Years	8 years
3	Nd Yag Laser with IPL	Burn & Plastic	10 Years	2 Years	8 years
4	Battery operated Dermatome	Burn & Plastic	8 Years	2 Years	6 years
5	Power Tools for Craniomaxillofacial and hand surgery (Electric micro drill)	Burn & Plastic	8 Years	2 Years	6 years
6	General plastic surgical instruments (Burns & Plastic)	Burn & Plastic	8 Years	2 Years	6 years
7	Powered Liposuction Set	Burn & Plastic	8 Years	2 Years	6 years
8	Maxillo Facial Instrument Set	Burn & Plastic	8 Years	2 Years	6 years
9	Nerve stimulator (intra operative)	Burn & Plastic	10 Years	2 Years	8 years
10	Operating Microscope (Plastic Surgery)	Burn & Plastic	10 Years	2 Years	8 years
11	Multiparameter Monitor	Burn & Plastic	10 Years	2 Years	8 years
12	Pneumatic Tourniquet	Burn & Plastic	5 Years	2 Years	3 years
13	Skin Graft Mesher	Burn & Plastic	8 Years	2 Years	6 years
14	Surgical Loupe	Burn & Plastic	8 Years	2 Years	6 years
15	Surgical Micro Motor System	Burn & Plastic	8 Years	2 Years	6 years
16	Micro Vascular Instruments	Burn & Plastic	8 Years	2 Years	6 years
17	Ear Reconstruction Set	Burn & Plastic	8 Years	2 Years	6 years
18	Cleft Lip and Palate Set	Burn & Plastic	8 Years	2 Years	6 years
19	humbey's Skin Grafting Knife	Burn & Plastic	8 Years	2 Years	6 years
20	Vaccum assisted wound closer system	Burn & Plastic	8 Years	2 Years	6 years
21	Rhinoplasty Instrument Set	Burn & Plastic	8 Years	2 Years	6 years

DEPARTMENT OF NUCLEAR MEDICINE

SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Gamma Camera	NUCLEAR MEDICINE	10 Years	2 Years	8 years
2	PET CT	NUCLEAR MEDICINE	10 Years	2 Years	8 years

3	Cyclotron	NUCLEAR MEDICINE	25 Years	5 Years	5 years
OTHER DEPARTMENTS					
DEPARTMENT OF RADIOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	CT 128 Slice	Radiology	10 Years	2 Years	8 years
2	CT 256 Slice	Radiology	10 Years	2 Years	8 years
3	Biplane DSA	Radiology	10 Years	2 Years	8 years
4	DRF	Radiology	10 Years	2 Years	8 years
5	MRI 3T	Radiology	10 Years	2 Years	8 years
6	MRI 1.5 T	Radiology	10 Years	2 Years	8 years
7	Digital X-Ray 1000 mA	Radiology	10 Years	2 Years	8 years
8	Mobile X-Ray (High Frequency)	Radiology	10 Years	2 Years	8 years
9	Colour Doppler 4D	Radiology	10 Years	2 Years	8 years
10	Colour Doppler (2D & 3D)	Radiology	10 Years	2 Years	8 years
11	Portable Colour Doppler	Radiology	10 Years	2 Years	8 years
12	CR System	Radiology	10 Years	2 Years	8 years
13	Digital Mammography	Radiology	10 Years	2 Years	8 years
DEPARTMENT OF ANAESTHESIOLOGY					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Anesthesia work station with monitor and ventilator	Anaesthesia	10 Years	2 Years	8 years
2	Defibrillator with CPR capability	Anaesthesia	10 Years	2 Years	8 years
3	Fibreoptic bronchoscope with monitor and recording facility for adult and paediatric	Anaesthesia	10 Years	2 Years	8 years
4	ICU ventilator	Anaesthesia	10 Years	2 Years	8 years
5	ICU monitor with CNS (5 nos)	Anaesthesia	10 Years	2 Years	8 years
6	Blood Gas Analyser	Anaesthesia	8 Years	2 Years	6 years
7	Transport ventilator	Anaesthesia	10 Years	2 Years	8 years
8	Transport Monitor	Anaesthesia	10 Years	2 Years	8 years
DEPARTMENT OF BLOOD BANK					
Sl.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	DONOR COUCH	Blood Bank	5 Years	2 Years	3 years
2	REFRIGERATED BLOOD BAG CENTRIFUGE (12 BAGS)	Blood Bank	8 Years	2 Years	6 years
3	-40 DEEP FREEZER	Blood Bank	8 Years	2 Years	6 years
4	-80 DEEP FREEZER	Blood Bank	8 Years	2 Years	6 years
5	PLATELET AGITATOR & INCUBATOR (96 BAGS)	Blood Bank	5 Years	2 Years	3 years
6	CRYO BATH	Blood Bank	8 Years	2 Years	6 years
7	STERILE CONNECTING DEVICE	Blood Bank	8 Years	2 Years	6 years
8	ELISA READER AND WASHER	Blood Bank	10 Years	2 Years	8 years

9	GEL / BEAD CENTRIFUGE AND INCUBATOR	Blood Bank	8 Years	2 Years	6 years
10	Ph METER	Blood Bank	8 Years	2 Years	6 years
11	CELL COUNTER (3 PART DIFF.)	Blood Bank	10 Years	2 Years	8 years
12	APHERESIS MACHINE	Blood Bank	10 Years	2 Years	8 years
DEPARTMENT OF EMERGENCY AND TRAUMA					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Defibrillator	Emergency & Trauma	10 Years	2 Years	8 years
2	Mobile X ray-100 mA	Emergency & Trauma	10 Years	2 Years	8 years
3	Portable Ventilator	Emergency & Trauma	10 Years	2 Years	8 years
4	Multiparameter Monitor	Emergency & Trauma	10 Years	2 Years	8 years
5	ICU ventilators	Emergency & Trauma	10 Years	2 Years	8 years
6	ESU	Emergency & Trauma	10 Years	2 Years	8 years
7	Operating Table-Electro Hydraulic	Emergency & Trauma	10 Years	2 Years	8 years
8	Portable Colour Doppler	Emergency & Trauma	10 Years	2 Years	8 years
DEPARTMENT OF AYUSH					
SI.No	Name of the Item	Department	Life Cycle	Warranty	CMC
1	Refrigerated centrifuge	AYUSH	8 Years	2 Years	6 years
2	CENTRIFUGE - TABLE TOP	AYUSH	8 Years	2 Years	6 years
3	DEEP FREEZER -20oC	AYUSH	8 Years	2 Years	6 years
4	DEEP FREEZER -80°C	AYUSH	8 Years	2 Years	6 years
5	Bi HEAD MICRO LED FLUOROSCEENCE MICROSCOPE	AYUSH	10 Years	2 Years	8 years
6	LYOPHILIZER (Freeze Dryer)	AYUSH	5 Years	2 Years	3 years
7	DISSECTING MICROSCOPE	AYUSH	10 Years	2 Years	8 years
8	INVERTED PHASE CONTRAST MICROSCOPE	AYUSH	10 Years	2 Years	8 years
9	AUTOMATED URINE ANALYSER	AYUSH	10 Years	2 Years	8 years
10	FULLY AUTOMATED CELL COUNTER (3 PART)	AYUSH	10 Years	2 Years	8 years
11	ELISA READER & WASHER	AYUSH	10 Years	2 Years	8 years
12	DISSOLUTION APPARATUS – 6 stations	AYUSH	5 Years	2 Years	3 years
13	DISINTEGRATION APPARATUS	AYUSH	5 Years	2 Years	3 years
14	FRIABILITY APPARATUS	AYUSH	5 Years	2 Years	3 years

ANNEXURE-IV



प्रो.(डॉ.) अतुल गोयल

Prof. (Dr.) Atul Goel

MD (Med.)

स्वास्थ्य सेवा महानिदेशक

DIRECTOR GENERAL OF HEALTH SERVICES



सत्यमेव जयते

भारत सरकार
स्वास्थ्य एवं परिवार कल्याण मंत्रालय
स्वास्थ्य सेवा महानिदेशालय
Government of India
Ministry of Health & Family Welfare
Directorate General of Health Services

D.O. No. Y-11012/05/2023-PC
23 July 2024

Dear Dr. Siddhartha,

You may aware that Ministry of Health & Family Welfare, Govt. of India is envisaging comprehensive plan for maintenance of Bio-Medical Equipment at all Central Government Medical Colleges & Hospitals. In this regard, a Committee has been constituted under Chairmanship of Director General Health Services (DGHS) for exploring the feasibility of engaging a single or multiple agencies for comprehensive maintenance of Bio-Medical Equipment to all the Central Govt Hospitals and Healthcare Institutes including Medical Colleges & Hospitals.

During deliberations of the Committee, it has been brought into our notice that Health & Family Welfare Department, Government of West Bengal has engaged HITES for comprehensive maintenance of Bio-Medical Equipment to all the Hospitals and Healthcare units including Medical Colleges & Hospitals, District hospitals, Sub Divisional Hospitals, State General Hospitals, Block Primary Health Centres, Rural hospitals, Primary Health Centres, Sub Centres, Urban Primary Health Centre and other Health Units.

In view of above, your feedback/inputs on the following points would help us for drafting comprehensive plan for maintenance of Bio-Medical equipment at all Central Government Medical Institutions:

- i) Scope of the project
- ii) Digital Tagging & mapping of all Bio-Medical equipment
- iii) Proportion (percentage) of Medical Equipment covered under the project at different levels
- iv) Breakdown Response Time, Backup & Quality of Services provided
- v) Back-up services and manpower stationed
- vi) Warranty Management and Preventive Maintenance
- vii) Onsite Users Training
- viii) Overall feedback & experience of the project

Warm Personal Regards,

Yours sincerely,

(Atul Goel)

To

Dr. Siddhartha Niyogi
Director,
Directorate of Health Services
Health & Family Welfare Department
Govt of West Bengal
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