<u>Supplementary Guidance Note on preparation of proposals under "India COVID 19 Emergency Response and Health Systems Preparedness Package: Phase II"</u>

1. Background

- Pursuant to the appraisal meetings held with the States/UTs, it is arrived that the States/UTs are converting their existing facilities as District Paediatric Units and CoE, instead of new pre-fab constructions originally envisaged and as elaborated in the guidance note, NHSRC has revised the unit rate for the few components of the District Paediatric Units and CoE.
- In view of above reasons, it is proposed to have following categories for creating these components either by creating new Infrastructure (Green field) or by upgradation / renovation (Brown field) of existing Infrastructure.
- States/UTs have the option to go for green-field or brown-field as per the local context and it is to be ensured that any new construction has to be completed within 2-3 months, if the green-field option is exercised by the State.
- It is to inform that the cost indicated against sub-heads are suggestive in nature and the requirement should be reflected after the proper gap analysis and also taking into consideration the resources / equipment / materials already available in the healthcare facilities, including Medical Colleges, which are earmarked as *Centres for Excellence (CoE)*.
- It is proposed to issue sanctions to the States/UTs under brown-field only, as States have specifically not indicated in their proposals and also during the appraisal meetings.
- State is requested to ensure that there are no duplication of approvals such as Oxygen support to these Paediatric beds and the support under MGPS for the entire hospital, where these Paediatric units are located.

2. <u>Detailed unit costing of few components under ECRP-II</u>

- (i) Establishing dedicated Paediatric care units in all the 736 Districts-(supplementary to the Para 3.a.1 on page no.-4 of Guidance note dated 14.07.21)
- All pediatric beds must be supported by regular oxygen supply (PSAs, LMO etc.), and MGPS and basic equipment as per the "Guidelines on Operationalization of COVID Care Services for Children & Adolescents" by GoI.
- While establishing paediatric care unit, a continuum of care approach needs to be adopted, i.e., the same hospital should ideally have oxygen beds, HDU beds and ICU beds for assured management of cases.
- It is suggested that a minimum area of 18 square meters per bed for pediatric oxygen supported bed is required in compliance with IPHS norms.
- The support includes for the oxygen support, equipment, negative pressure, sensor, and new prefab unit (wherever Green-field construction is opted)

I. OXYGEN SUPPORTED BEDS

A. Unit Cost for 30 bedded Paediatric Care Unit or 20 bedded Paediatric Care Unit (Oxygen supported beds) under new Pre-fab construction or Green-Field:

Unit cost for paediatric oxygen supported bed	Sub-component		num permissible ost per bed (one time)
Rs. 3.34 lakh per	Oxygen support for each bed with	₹	60,000*
oxygen	manifold & copper pipeline		
supported bed	Beds & Accessories	₹ 10,000	
	Negative Pressure with Sensor	₹ 10,000	
	Infrastructure (New prefab unit)	₹	2,54,000
Т	Total cost for one bed		3,34,000
Unit cost for 20 beds		₹	66,80,000
1	Unit cost for 30 beds	₹	1,00,20,000

B. Unit Cost for 30 bedded Paediatric Care Unit or 20 bedded Paediatric Care Unit (Oxygen supported beds) in the existing infrastructure or Brown-Field construction (Renovation / Upgradation):

Unit cost for paediatric oxygen supported bed	Sub-component		imum permissible cost per bed (one time)
Rs. 1.30 lakh per	Oxygen support for each bed with	₹	60,000*
oxygen	manifold & copper pipeline		
supported bed	Beds & Accessories	₹	10,000
	Negative Pressure with Sensor	₹	10,000
	Infrastructure (renovation	₹	50,000
	/upgradation)		
Т	Total cost for one bed		1,30,000
Unit cost for 20 beds		₹	26,00,000
1	Unit cost for 30 beds	₹	39,00,000

^{*}Only for the facilities for which MGPS is not available / has not been asked under FMR S.2.7

II. HYBRID HDU AND ICU BEDS (8+4 = 12 BEDS)

- State must ensure a 12 bedded critical care unit (4 ICU and 8 HDU) either at district hospital as priority or a medical college.
- A Minimum area of 30 sq meter per bed for pediatric ICU and HDU beds shall be required in compliance with IPHS norms.
- Estimating the need of establishing either ICU beds or HDU beds is subject to the gap analysis exercised by the state.

A. Unit Cost for 12 bedded critical care unit (4 ICU and 8 HDU) under new Prefab construction or Green-Field:

Unit cost for ICU and HDU supported bed	Sub-component	perm	aximum issible Unit per ICU bed	permis	imum sible Unit · HDU bed
Rs. 2.89 crores for Hybrid ICU	Oxygen (1 oxygen bed with manifold & copper pipeline)	₹	80,000	₹	80,000
beds (8 HDU beds and 4 ICU	Equipment*, beds & Accessories	₹	21,00,735	₹	14,08,715
beds)	Air Handling Unit	₹	2,00,000	₹	2,00,000
	Infrastructure (new prefab Unit)	₹	4,50,000	₹	4,50,000
Total cost (per l	ped cost)	₹	28,30,735	₹	21,38,715
Cost for 4 ICU beds and 8 HDU beds			1,13,22,940 <i>r 4 ICU beds)</i>		1,71,09,720 8 HDU beds)
Setting up of nursing station under integrated hybrid HDU			₹	4,59,044	
Total cost		₹ 2,88,91,704			

^{*}Suggestive list of equipment is attached as Annexure 1

B. Unit Cost for 12 bedded critical care unit (4 ICU and 8 HDU) in the existing infrastructure or Brown-Field construction (Renovation / Upgradation):

Unit cost for ICU and HDU supported bed	Sub-component	per	Maximum missible Unit t per ICU bed		Maximum ermissible Unit st per HDU bed
Rs. 2.26 crores for Hybrid ICU	Oxygen (1 oxygen bed with manifold & copper pipeline)	₹	80,000*	₹	80,000*
beds (8 HDU	Equipment* & beds	₹	21,00,735	₹	14,08,715
beds and 4	Air Handling Unit	₹	50,000	₹	50,000
ICU beds)	Infrastructure (renovation / upgradation)	₹	1,20,000	₹	1,20,000

Total cost (per bed cost)	₹	23,50,735	₹.	16, 58,715
Cost for 4 ICU beds and 8 HDU beds	₹	94,02,940	₹.	1,32,69,720
Total Cost of one unit (4 ICU beds+ 8 HDU beds)		₹ 2,2	26,72	2,660

^{*}Only for the facilities for which MGPS is not available / has not been asked under FMR S.2.7

- (ii) Establishing Paediatric Centre of excellences (CoE) in each State/UT-(supplementary to the Para 3.a.2 on page no.-4-5 of Guidance note dated 14.07.21)
 - The CoE could be established in a Medical College or a Central Hospital (such as AIIMS, INIs etc.) or a State Hospital.
 - The CoEs as HUB will be providing Tele-ICU services to the District Hospitals as SPOKE facilities, mentoring and technical hand holding to district paediatric unit.
 - States may also opt for the Tele-ICU software developed by CDAC. Wherever existing software is being utilized, budget for development of new software may not be proposed by the States/UTs.
 - Support to the District Hospitals or District Paediatric units, will be based on the number of such units created or available and connected to the CoE and State may propose according to the number of the such District Spokes planned in the States

A. Unit Cost for Paediatric CoE under new Pre-fab construction or Green-Field:

Unit cost for establishing CoE	Sub-components	pe	nximum rmissible iit cost
For	Infrastructure cost for establishment of 12 bedded	₹	2,26,72,660
establishing	critical care unit (4 ICU beds and 8 HDU beds) in the		
one CoE per	СоЕ		
state/UT @	(where the selected CoE does not have sanction of		
Rs 5 Cr	Paediatric ICU units under ECRP-II)		
	Support to District Hospitals/District Paediatric Care	₹	2,10,00,000
	units as spoke** (Rs.7.0 lakh per SPOKE for 30		
	SPOKES)		
	Honorarium of a Coordinator at a HUB	₹	4,50,000
	Remuneration / Incentives** to the Specialists	₹	28,77,340
	(Rs.1500 per consultation for approximately 240		
	consultation per month for 8 months)		
	Software development (AI support)	₹	30,00,000
	Total	₹	5,00,00,000

^{**} State needs to reduce the budget depending on the number of spokes. Indicative cost break up for spoke under CoE is attached as Annexure 2.

B. Unit Cost for Paediatric CoE in the existing infrastructure where the CoE has been sanctioned with the 12 bedded critical care units or Brown-Field construction:

Unit cost for establishing CoE	Sub-components	Maximu Unit cost	m permissible t
For	Support to District Hospitals/District Paediatric Care units as spoke** (Rs.7.0 lakh per SPOKE for 30 SPOKES)	₹	2,10,00,000
establishing	Honorarium of a Coordinator at a HUB	₹	4,50,000
one CoE per state/UT @ Rs 2.73 Cr	Remuneration / Incentives** to the Specialists (Rs.1500 per consultation for approximately 200 consultation per month for 8 months)	₹	28,80,000
	Software development (AI support)	₹	30,00,000
	Total	₹	2,73,30,000

^{**} State needs to reduce the budget depending on the number of spokes.

C. Indicative Cost Breakup for Spoke under Paediatric CoE under ECRP-II:

Particular	Unit cost	Total cost
Honorarium of a coordinator at spoke	Rs.50000/Month	Rs. 4,00,000 for 8 months
IT infrastructure and equipment	Rs.2,25,000	Rs.2,25,000
Renovation/contingency etc.	Rs.75,000	Rs.75,000
Total		Rs. 7,00,000 per spoke

- (iii) Augmentation of Additional Beds by provision of Prefab Units of varying capacity closer to the people (SHC, PHC and CHC level)- (supplementary to the Para 3.a.3 on page no.-5-6 of Guidance note dated 14.07.21)
 - At the level of HWC-SHC and HWC-PHC, existing health and wellness room can be designated as isolation ward with 6 beds each placed at the distance of 1 metre (3 feet) distance from each other.
 - At the level of CHC, 20 bedded such units can be added.
 - It is suggested that a minimum area of 18 square meters per bed for pediatric oxygen supported bed shall be required in compliance with IPHS norms.

A. Unit Cost Particulars 6 bedded unit at Sub Health Centres (SCHs) and Primary Health Centres (PHCs):

Unit cost	Sub-components	Maxii perm Unit o	issible
Rs 9.83 lakhs per	Pre fab structure for 6 beds	₹	9,68,400
unit	Equipment, beds and oxygen cylinder	₹	15,000
To	₹	9,83,000	

B. Unit Cost Particulars 20 bedded unit at Community Health Centres (CHCs):

Unit cost	Sub-components	Maximum permissible Unit cost	
Rs 35 lakhs per	Pre fab structure for 20 beds	₹	32,28,000
unit	Equipment, beds and oxygen cylinder	₹	2,72,000
Total for 20 bedded units			35,00,000

- (iv) Augmentation of 20,000 ICU beds in public healthcare facilities in the states including 20% paediatric ICU beds- (supplementary to the Para 3.a.4 on page no.-6 of Guidance note dated 14.07.21)
 - A Minimum area of 30 sq meter per bed for ICU beds shall be required in compliance with IPHS norms.

Unit Cost for each ICU bed:

Components	Unit cost	Sub	- iponents
Rs 16.85 lakhs per ICU bed	Oxygen support for each bed with manifold & copper pipeline	₹	80,000
	Equipment, beds & Accessories	₹	15,50,000
	Air Handling Unit	₹	50,000
	Total		

^{***}Suggestive list of equipment is attached as Annexure 2.

Suggestive list of Equipment supported under ECRP-II for 12 bedded Paediatric Critical Unit (4 ICU beds and 8 HDU beds)

ICU (4 Bedded)		HDU (8 Bedded)	
Equipment	No. of	Equipments	No. of
	Units		Units
Diagnostic Equipment		Diagnostic Equipment	
Portable EEG	1	Portable EEG	0
Otoscope	1	Otoscope	1
Ophthalmoscope	1	Ophthalmoscope	1
Portable X- Ray	1	Portable X- Ray	1
12 Lead Portable ECG	1	12 Lead Portable ECG	1
Blood Gas Machine	1	Blood Gas Machine	0
Glucometer	2	Glucometer	1
Portable Ultrasound	1	Portable Ultrasound	0
ICU beds	4	ICU beds	8
Procedural Equipment		Procedural Equipment	
Emergency Cart	2	Emergency Cart	2
Ventilator Invasive	4	C-Pap/ Bi- Pap Machine	8
High Flow Nasal Cannula	4	High Flow Nasal Cannula	8
Micro- infusion pumps	4	Micro- infusion pumps	2
Defebrillator/ Cardioverter	1	Defebrillator/ Cardioverter	1
Portable Suction	4	Portable Suction	2
Pediatric Ambu Bag	4	Pediatric Ambu Bag	8
T- Piece	1	T- Piece	1
Pediatric Laryngoscope (Curved &	1	Pediatric Laryngoscope (Curved &	1
Straight Blades)	1	Straight Blades)	1
Intubating Flexible Laryngoscope/	1	Intubating Flexible Laryngoscope/	1
Fibreoptic Bronchoscope		Fibreoptic Bronchoscope	1
Nebulizer (6)	2	Nebulizer (6)	2
Oxygen Hood (Head Box)	4	Oxygen Hood (Head Box)	8
Oxygen (Portable) Cylinders (10 L)	4	Oxygen (Portable) Cylinders (10 L)	2
Overhead Warmer/ Radiant	2	Overhead Warmer/ Radiant	4
Warmer		Warmer	T
Incubator	1	Incubator	1
Procedure Light (Portable)	1	Procedure Light (Portable)	1
Multi- para Monitor	4	Multi- para Monitor	8
Intra-osseous needle	4	Intra-osseous needle	2
Pulse oximeter	1	Pulse oximeter	1
Thermometer	2	Thermometer	2
NIBP with all cuff sizes	2	NIBP with all cuff sizes	2
Torch	1	Torch	1
Algorithms/flow charts	3	Algorithms/flow charts	2
X-ray view box	1	X-ray view box	1
Printed drug dosages for children	1	Printed drug dosages for children	1

ICU (4 Bedded)		HDU (8 Bedded)	
Equipment	No. of Units	Equipments	No. of Units
Patient Stretcher and Wheel chair	1	Patient Stretcher and Wheel chair	1
Measuring tape	1	Measuring tape	1
Miscellaneous Equipment		Miscellaneous Equipment	
Phototherapy	1	Phototherapy	1
Bedside Table	4	Bedside Table 8	
Over bed Table	4	Over bed Table	8
IV Pole	4	IV Pole	8
Bedside Chair	4	Bedside Chair	8
Infant/ neonatal weighing Machine (6)	2	Infant/ neonatal weighing Machine (6)	4
Stethoscope	2	Stethoscope	4
Table and chairs for staff	5	Table and chairs for staff	5
Almirah	1	Almirah	1
Needle cutters	1	Needle cutters	1
Water Cooler	0	Water Cooler	0
Refrigerator	1	Refrigerator	1
BLS Ambulance with 24X7 oxygen		BLS Ambulance with 24X7 oxygen	
support – mandatory 24X 7		support – mandatory 24X 7	

Consumables as per quantum sufficient such as Endotracheal Tubes (2.5-7 mm), Pediatric Size Masks, Laryngeal Mask Airway, Rebreather Mask, Non Rebreather Mask, Nasal Cannula, Nasogastric Tubes, Multilumen Central Catheters, Cannula for Intravenous Access and Arterial Lines, Chest Tubes, Bio-Medical Wate Bins, Bandages, adhesives, Pediatric drip set, Venturi masks, IV infusion sets/dosiflow, Adhesive tape, Syringes, Disposable needles, Suction catheters, Spacers and Masks, Gloves, Tracheostomy Kits, Blood transfusion sets, LP needles, ICD tubes, bags, Closed Suction Catheters, Urine Catheters and bags, Arterial line transducers, Peritoneal dialysis catheters, PD Dialysis Fluid, Air Mattresses etc.

Suggestive list of Equipment supported under ECRP-II for ICU beds @ Rs. 16.85 lakh per ICU bed $\,$

Sl. no.	Short Description of Goods	Quantity
1	ICU BED -MOTORISED WITH MATTRESS	12
2	BEDSIDE LOCKER	12
3	OVERBED TABLE	12
4	IV STAND WITH SS ROD AND CASTOR BASE	12
5	FOOT STEP-DOUBLE	12
6	BED SIDE STOOL	12
7	BIOMEDICAL WASTE BIN- SMALL -SET OF 3	12
8	MULTI PARA MONITOR	12
9	ICU VENTILATOR	12
10	SYRINGE PUMP	12
11	INFUSION PUMP	12
12	LARYNGOSCOPE	4
13	THERMOMETER- INFRARED TYPE	4
14	AMBU BAG ADULT	12
15	ECG MACHINE 12 CHANNEL	2
16	PORTABLE X RAY	1
17	PORTABLE ULTRASOUND	1
18	BIPHASIC DEFIBRILLATOR	1
19	ABG MACHINE WITH ISE	1
20	ELECTRONIC WEIGHING SCALE- ADULT	1
21	PATIENT WARMING SYSTEM	3
22	ELECTRICAL SUCTION APPARATUS	6
23	PATIENT STRETCHER (FULLY SS)	2
24	WHEEL CHAIR - FOLDABLE	2
25	CRASH CART	2
26	DRESSING TROLLEY	2
27	DRUG TROLLEY/MEDICINE CART	2
28	ECG MACHINE TROLLEY	3
29	INSTRUMENT TROLLEY	2
30	OXYGEN CYLINDER TROLLEY	2
31	GLUCOMETER	4
32	STETHOSCOPE	4