COVID-19 Outbreak Control and Prevention State Cell
Health & Family Welfare Department
Government of Kerala

Guidelines on Tele ICU and Intensive Care Services

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Preventing COVID-19 mortality is one of the primary objectives of COVID control strategies in Kerala since the first COVID case was detected in the State. The state has successfully achieved the objective with very low case fatality till date.

As the number of cases increases and as the disease penetrates to the vulnerable population, the proportion of cases requiring critical care may go up. For efficient management of resources of Intensivist and critical care specialist following advisory is issued.

District Pool of Intensivists & Critical Care Experts

A district pool shall be formed with all available Intensivists/ experienced in critical care in the district irrespective of where they are working. District pool shall also include post graduates doing critical care/anaesthesia/pulmonology. The voluntary involvement from Private sector to be facilitated.

For Hospitals managing critically ill patients

A. Ensure round the clock services of one Intensivist/critical care expert at major hospitals which handles critically ill COVID-19 patients. In districts where there is a shortage of intensivists in Government sector, District Health & Family Welfare society shall consider additional appointments of intensivists or outsourcing services of intensivists for fixed fee per interventions.

B. Hospitals managing critically ill patients can formulate an inhouse tele critical care monitoring room with central monitors/CCTVs and alarm system. Acute care area monitors shall be connected to the tele critical care monitoring team. Every patient in ICU critical care shall be monitored minute to minute.

C. A crisis crash team shall be formed to ensure that they could physically reach patients within lowest possible time.
Capacity Building

- District to establish a system to assess the skill competence of junior residents, medical officer, nurses on basic ICU intervention skills in all hospitals.
- Plan regular training and retraining session for intensive care by the support team.
- Medical Colleges may formed teams of PG students and faculties to provide handholding support in the recently established ICUs in the District Hospitals / General Hospitals. Once the teams in the Hospitals are confident they will perform by seeking teleconsultation if needed.

Tele ICU services - Hub & Spoke Model

- Tele ICU Command Centre shall be established which will be run by experienced Intensivists and Nurses 24*7.
- This will ensure all Critically ill patients are seen by Intensivists & they could guide doctors at all hospitals on a case to case management.
- Services of intensivists who could work honorary and remotely even from outside state shall be utilised for Tele ICU services.
- Infrastructure for ensuring Tele ICUs including Monitors, Computers with headphone, speaker, High speed Internet connection shall be established.
- All IT enabled system shall be hosted in Government approved server with proper approvals.
- Districts which cannot establish such tele ICU facility shall be connected to the Tele ICU facility of the neighbouring district.
- Encourage Private hospitals with Intensive care expertise to provide Tele ICU services to small hospitals in a Hub and Spoke model.
- Schematic representation of the concept is shown in figure 1.

Administration and Monitoring

- District Medical Officer and Institutional medical boards shall oversee the plan, establish systems and monitor the activities. A nodal officer for the Tele ICU shall be nominated in every district. It may be appropriately decided at the district level.
- A proper plan and report in this regard shall be submitted. Plan of Thrissur district has been attached for reference.

Principal Secretary
Fig 1 Schematic Representation of Tele ICU- Hub and Spoke Model

District Hospital

Taluk Hospital

Tele ICU- Command Centre

Private Hospital

Private Hospital