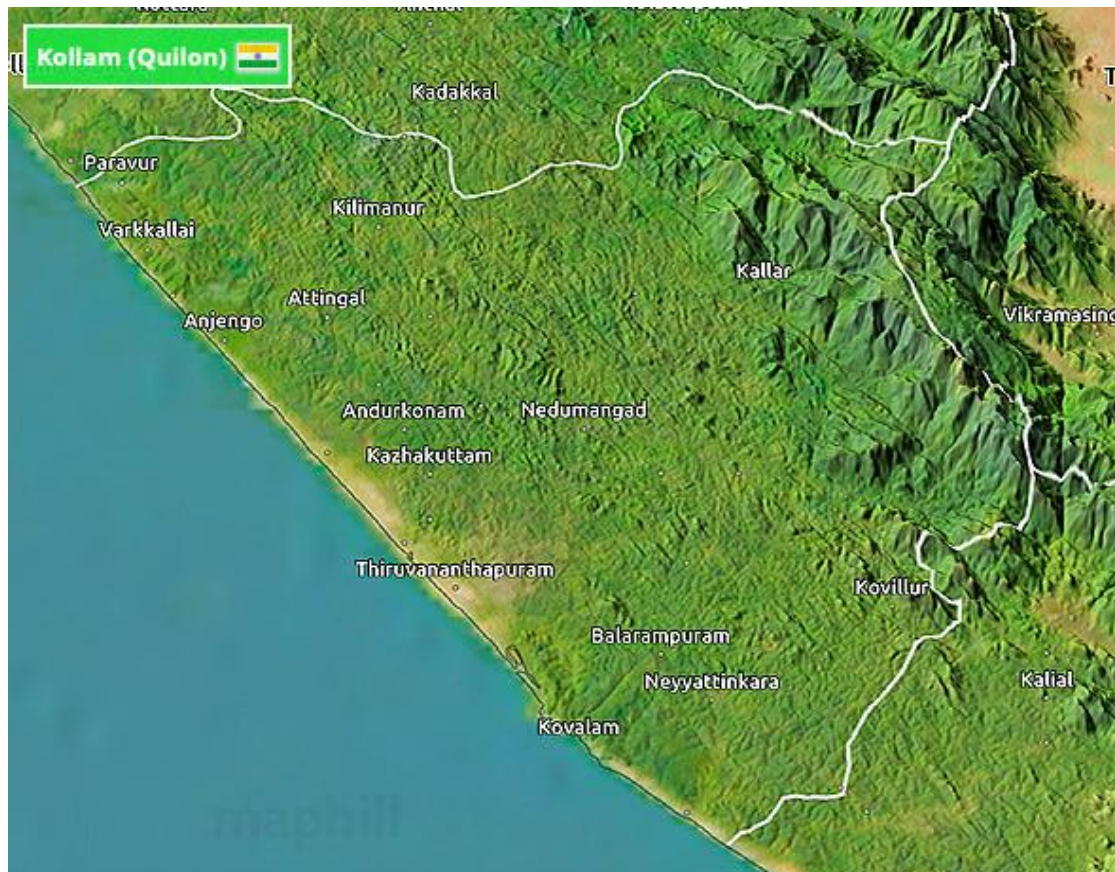


COVID-19 -COASTAL PLAN

Management of COVID-19 in Coastal Zones of Trivandrum



Department of Health and Family Welfare

Government of Kerala

July 2020

TABLE OF CONTENTS

| | |
|---|-----------|
| THIRUVANANTHAPURAM BASIC FACTS | 3 |
| COVID-19 – WHERE THIRUVANANTHAPURAM STANDS (AS ON 16TH JULY 2020) | 4 |
| Ward-Wise maps..... | 5 |
| INTERVENTION PLAN ZONAL STRATEGIES | 7 |
| ANNEXURE 1 HEALTH INFRASTRUCTURE - GOVT | 20 |
| ANNEXURE 2 HEALTH INFRASTRUCTURE – PRIVATE | 26 |
| ANNEXURE 3 CFLTC DETAILS | 31 |
| ANNEXURE 4 HEALTH POSTS – COVID AND NON-COVID MANAGEMENT | 31 |
| ANNEXURE 5 MATERIAL AND SUPPLIES | 47 |
| ANNEXURE 6 HR MANAGEMENT | 50 |
| ANNEXURE 7 EXPERT HEALTH TEAM VISIT | 56 |
| ANNEXURE 8 HEALTH DIRECTORY | 58 |

I. THIRUVANANTHAPURAM BASIC FACTS

Thiruvananthapuram, formerly Trivandrum, is the capital of Kerala, located on the west coastline of India along the Arabian Sea. It is the most populous city in India with the population of 957,730 as of 2011. Thiruvananthapuram was named the best Kerala city to live in, by a field survey conducted by The Times of India. Thiruvananthapuram is a major tourist centre, known for the Padmanabhaswamy Temple, the beaches of Kovalam and Varkala, the backwaters of Poovar and Anchuthengu and its Western Ghats tracts of Ponmudi and the Agastyamala. Thiruvananthapuram is also a notable academic and research hub and is home to the University of Kerala, Kerala Technological University the regional headquarters of Indira Gandhi National Open University, and many other schools and colleges.

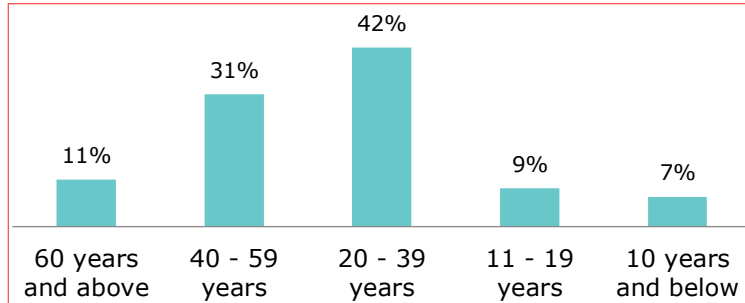
This capital city is witnessing a marked increase in the number of cases of the COVID-19 and it's vital to be vigilant and strengthen the surveillance.

| Thiruvananthapuram - Basic Facts | |
|----------------------------------|-------------|
| Area | 2192 Sq. Km |
| Population (2011 census) | 3307284 |
| Population Density | 1506 |
| Corporations | 1 |
| Municipalities | 4 |
| Panchayats | 73 |
| Block Panchayats | 11 |
| Villages | 124 |

II. COVID-19 – WHERE THIRUVANANTHAPURAM STANDS (AS ON 16TH JULY 2020)

| Key Figures | Cumulative |
|-----------------------|------------|
| Total Confirmed cases | 1499 |
| Total Active Cases | 1274 |
| Total Recovered | 218 |
| Total Deaths | 0 |

Age Distribution of Active Cases in Thiruvananthapuram



Hospital Admission details –Tvm

| Sector | 15.07.2020 | Admissions | Discharges | Remaining |
|--------------|------------|------------|------------|-------------|
| Government | 917 | 92 | 40 | 969 |
| Private | 50 | 13 | 16 | 47 |
| Total | 967 | 105 | 56 | 1016 |

COVID Hospital Status –Tvm

| HOSPITAL | NO OF BEDS | BEDS REMAINING | No of ICU beds | ICU beds remaining |
|----------|------------|----------------|----------------|--------------------|
| MCH | 788 | 502 | 369 | 365 |
| GH | 187 | 38 | 25 | 25 |
| SAT | 88 | 0 | 10 | 10 |

| QUARANTINE FACILITY | | | | |
|----------------------------|----------------------|------------------------|-----------------------|---------------------|
| | TOTAL INMATES | ROOMS AVAILABLE | ROOMS OCCUPIED | ROOMS VACANT |
| GOVT | 1419 | 2363 | 1196 | 1167 |
| PAID | 236 | 606 | 203 | 314 |
| TOTAL | 1645 | 2969 | 1399 | 1481 |

WARD-WISE MAPS

pancnayat area.

Spatial distribution of cases

Figure 1: Distribution of cases in Manacaud (Ward 72), Attukal (Ward 70), Kalady (Ward 55) areas

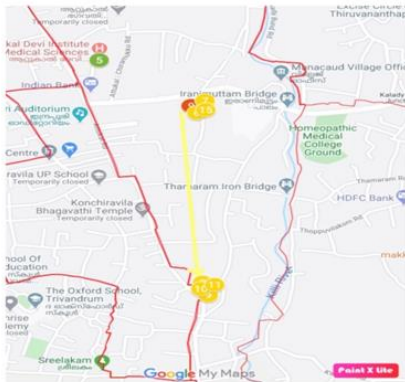


Figure 2: Distribution of cases from Poonthura (Ward 66), Muttathara (Ward 78), Puthenpally (Ward 74)

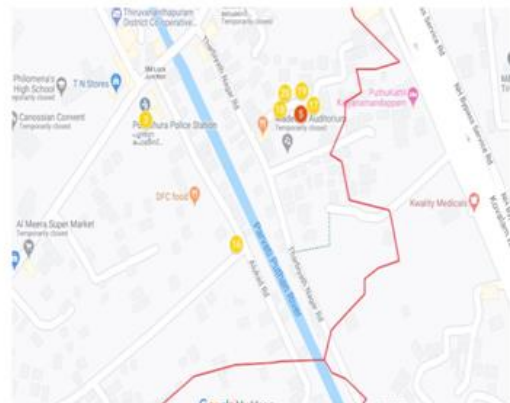
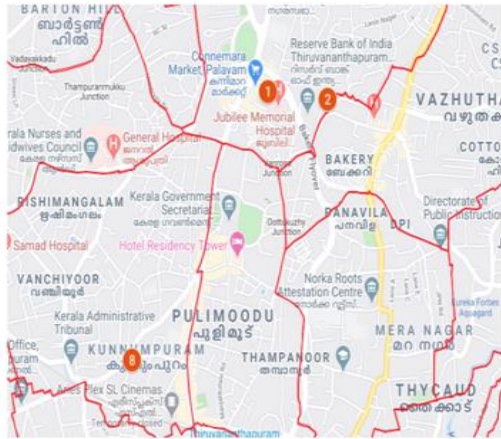


Figure 3: Distribution of cases from Palayam (Ward 27), Vanchiyoor (Ward 82) and Pettah (Ward 93)



| Clusters in Thiruvananthapuram | | | |
|--------------------------------|--------|-----------------|--------|
| Name | Status | Confirmed cases | Deaths |
| Attukal | Active | 6 | 0 |
| Poonthura | Active | 416 | 0 |
| Manacaud | Active | 23 | 0 |
| Muttathara | Active | 10 | 0 |
| Palayam | Active | 5 | 0 |
| vizhinjam | Active | 75 | 0 |
| thiruvallam | Active | 16 | 0 |
| venganoor | Active | 12 | 0 |
| valiyathura | Active | 15 | 0 |
| azhoor GP (ward 1) | Active | 1 | 0 |
| poovachal GP | Active | 15 | 0 |
| Kulathoor GP (9-14) | Active | 6 | 0 |
| Anchuthengu GP | Active | 34 | 0 |
| chiranyinkeezhu GP (5-14) | Active | 14 | 0 |
| Karumkulam GP (14-16) | Active | 82 | 0 |
| panavoor GP | Active | 5 | 0 |
| Kunnathukal GP (19) | Active | 12 | 0 |
| Kadakkavoor (9) | Active | 2 | 0 |

| | | | |
|-------------------------------|--------|----|---|
| VSSC (institutional) | Active | 4 | 0 |
| KIMS (hospital) | Active | 8 | 0 |
| Govt medical college | Active | 12 | 0 |
| saraswathy hospital parassala | Active | 8 | 0 |

| Clusters in Thiruvananthapuram – Summary | | | | | | |
|--|-----------------|--------------------|------------------|-------------------|------------------|-------------|
| Total clusters | Active clusters | Contained clusters | TYPE OF CLUSTERS | | | |
| | | | Large community | Limited community | Closed community | Institution |
| 22 | 22 | 0 | 14 | 4 | 0 | 4 |

III. INTERVENTION PLAN

ZONAL STRATEGIES FOR CLUSTER CONTAINMENT

- The objective of cluster containment is to break cycle of transmission and decrease the morbidity and mortality due to COVID-19.
- A cluster is defined as ‘an unusual aggregation of health events that are grouped together in time and space and that are reported to a health agency’ (CDC).
- Clusters of human cases are formed when there is local transmission.
- **Local transmission is defined as a laboratory confirmed case of COVID-19:**
- Who has travelled from a place of known transmission (ie: Interstate /International travellers

- Who has not travelled from an area reporting confirmed cases of COVID-19
- Who had no exposure to a person travelling from COVID-19 affected area
- **Less than 15 cases which are epidemiologically linked as a working definition in an area, can be treated as a cluster. There could be single or multiple foci of local transmission.**
- The cluster containment strategy would be to contain the disease within a defined geographic area
- by early detection,
- breaking the chain of transmission and thus preventing its spread to new areas

III A- Duties of the RRT(One RRT Team per Ward)

- Each RRT** comprises of
- 1) Anganwadi teacher.
 - 2) Kudumbashree member
 - 3) Volunteers under the supervision of JHI /JPHN
- Active House to house surveillance daily in the containment zone from 8:00 AM to 2:00 PM.
 - Preparation of line list of the family members and those having symptoms.
 - Provision of a mask to the suspect case and to the care giver identified by the family.
 - The patient to be isolated at home till such time he/she is examined by the supervisory officer.
 - Follow up of contacts identified by the RRTs within the sector allocated to them.

- All ILI/SARI cases reported in the last 14 days by the IDSP in the containment zone to be tracked and reviewed to identify any missed case of COVID-19 in the community.

III B- Activities to be undertaken in the containment zone

Surveillance:

- Active search for cases through physical house to house surveillance by Special Teams formed for the purpose . The residential areas to be divided into sectors for the ASHAs/Anganwadi workers/ANMs each covering 20-25 or more households (30 households in difficult areas) depending upon the number of cases, geographical distribution of cases
- Testing of all cases and contacts as per testing guidelines
- Contact tracing
- Identification of local community volunteers to help in surveillance, contact tracing and risk communication
- Strict enforcement of social distancing
- Extensive IEC BCC on hand hygiene, respiratory hygiene, environmental sanitation and wearing of masks / face-covers- both interpersonal and community based
- Clinical management of all confirmed cases
- Listing of all health facilities both Govt and private and additional workforce in the containment zone of clusters
- Reporting of clinically suspect cases of COVID-19 on real time basis (including 'Nil' reports) to the control room at the district level.
- The contacts of the laboratory confirmed case/ suspect case of COVID-19 to be line-listed and tracked and kept under

surveillance at home for 28 days (by the designated field worker).

- Supervisory officer in whose jurisdiction, the laboratory confirmed case/ suspect case falls to inform the Control Room about all the contacts and their residential addresses.
- The control room will in turn inform the supervisory officers of concerned sectors for surveillance of the contacts.
- If the residential address of the contact is beyond the allotted sector, the district IDSP will inform the concerned Supervisory officer/concerned District IDSP/State IDSP.

III C Buffer Zone :

- A Buffer Zone, a large area has to be delineated around each containment zone.
- It shall be defined by the district administration/local urban bodies with technical inputs at local level.
- Buffer zone will be primarily the area wherein additional & focused attention is needed so as to ensure that infection does not spread to adjoining areas.

III D Activities to be done in Buffer Zone

- Passive surveillance for ILI and SARI cases through the existing Integrated Disease Surveillance Programme.
- Community awareness on risk communication and preventive measures such as personal hygiene, hand hygiene and respiratory etiquettes by (i) posters and pamphlets; (ii) audio only material; (iii) AV films
- Use of face cover, social distancing through enhanced IEC activities.

To ensure social distancing by:

- a. Cancelling all mass gathering events, meetings in public or private places.

b. Avoiding public places

c. Closure of schools, colleges and work places

- *Review of ILI/SARI cases reported in the last 14 days by the District Health Officials to identify any missed case of COVID-19 in the community.*
- If any identified case of ILI/SARI, sample to be collected and sent to the designated laboratories for testing COVID-19.
- Listing of all Govt and private health facilities as a part of mapping exercise.
- All such facilities both in Government and private sector (including clinics) shall report clinically suspect cases of COVID-19 on real time basis (including 'nil' reports) to the control room at the district level.

III E -Perimeter :

- Containment Zone is delineated with the perimeter which will be defined and there would be strict perimeter control with:
- Establishment of clear entry and exit points,
- No movement to be allowed except for medical emergencies and essential goods and services,
- No unchecked influx of population to be allowed and
- People transiting to be recorded and followed through IDSP.

Perimeter control

- No unchecked outward movement of population from the containment zone except for maintaining essential services (including medical emergencies) and government business continuity.
- Existing legal acts (i) Disaster Management Act (2005) (ii) Epidemic Act (1897) (iii) Cr.PC and (iv) State Public Health Acts to be used for implementation of Containment

- To limit unchecked influx of population into the containment zone.
- At the entry points inform the incoming travellers about precautions to be taken and also to provide travellers with an information pamphlet and mask.
- All vehicular movement, movement of public transport and personnel movement to be restricted.
- All roads including rural roads connecting the containment zone to be guarded by police.
- District administration to post signs and create awareness informing public about the perimeter control.
- Health workers posted at the exit point to conduct screening (e.g. interview travellers, measure temperature, record the place and duration of intended visit and keep complete record of intended place of stay).
- Details of all persons moving out of perimeter zone for essential/ emergency services to be recorded and followed up through IDSP.

Vehicles moving out of the perimeter control to be decontaminated with sodium hypochlorite (1%) solution.

III F Laboratory support

- Identified Govt and private network laboratory, nearest to the affected area, to be further strengthened to test samples (BSL 2 following BSL 3 precautions).
- If surge of samples it should be shifted to nearby labs.
- RT PCR, Gene Xpert, TRUE NAAT, Antigen testing , either pooled sampling or individual testing of symptomatics/ comorbidities of all persons in the line list to be done.

III G Hospital care

- All suspect cases, Category A and B (without co morbidities) detected in the containment/buffer zones (till a diagnosis is made) and those tested positive to be isolated in CFLTCs
- Those who are symptomatics (Category B&C) requiring intensive care and ventilator management will be taken to COVID Hospitals.

Surge Plan: Based on the risk assessment, (data suggested an exponential rise in the number of cases), the surge capacity of the identified hospitals to be enhanced, private hospitals to be roped in and sites for temporary hospitals identified and their logistic requirements to be worked out.

- Pre hospital care (Ambulance facility) to be provided
- Clinical management , Dead body disposal and Discharge policy based on existing state guidelines
- Material Logistics
- Transportation including ambulance facility
- Stay arrangements for the Hospital and field staff

III H Capacity Building

Trainings

- Epidemiologic investigation, Field surveillance, contact tracing, data management and reporting
- Surveillance at designated exit points from the containment zone
- Sampling, packaging and shipment of specimen
- Hospital infection prevention and control including use of appropriate PPEs and biomedical waste management

Clinical care of suspect and confirmed cases including ventilator management, critical care management

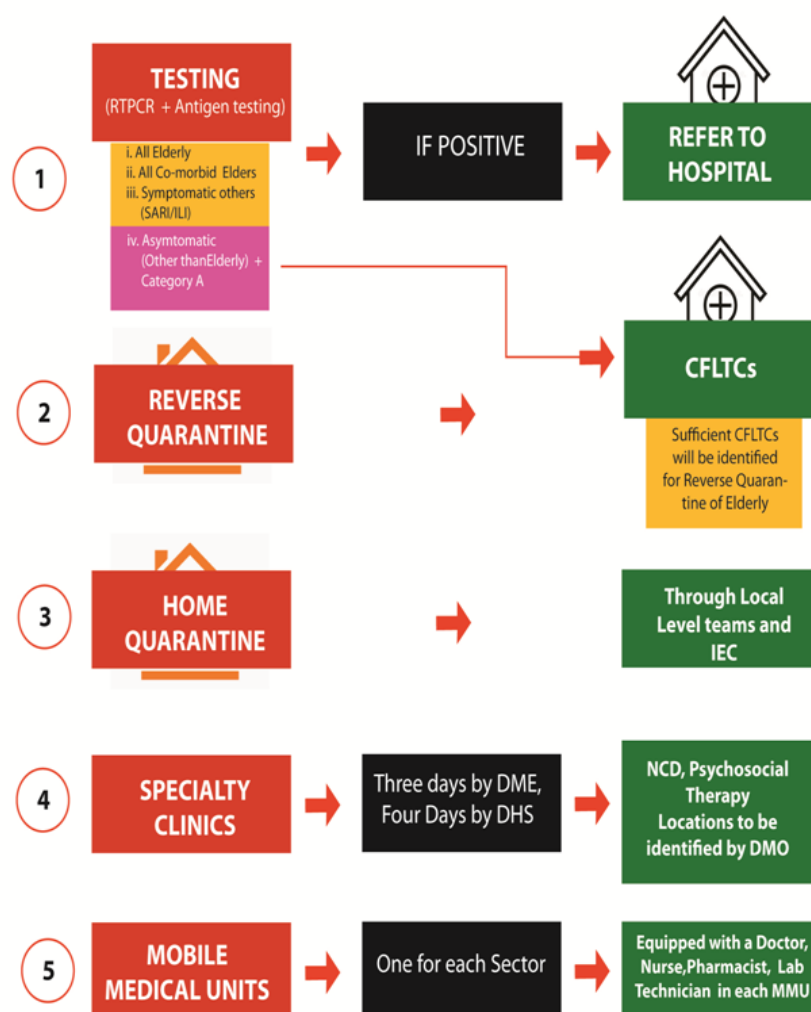
III I Scaling down of operations in clusters identified

- If no secondary laboratory confirmed COVID-19 case is reported from the containment and buffer zones for at-least 4 weeks after the last confirmed test has been isolated and all his contacts have been followed up for 28 days.
- The containment operation shall be deemed to be over 28 days from the discharge of last confirmed case (following negative tests as per discharge policy) from the designated health facility i.e. when the follow up of hospital contacts will be complete.
- The closing of the surveillance for the clusters could be independent of one another provided there is no geographic continuity between clusters.
- Surveillance to be continued for ILI/SARI.
- If the containment plan is not able to contain the outbreak and large numbers of cases start appearing, then a decision will need to be taken by State administration to abandon the containment plan and start on mitigation activities.

III J Demarcation of the Coastal Zones

| Coastal Zones – Thiruvananthapuram | | |
|------------------------------------|-------------------------------|------------------------------|
| Zone | Number of institutions | Sector officer |
| Zone 1 (Anchuthengu to Veli) | 4 | Deputy Director Rank officer |
| Zone 2 (Veli to Vizhinjam) | 3 | Deputy Director Rank officer |
| Zone 3 (Vizhinjam to Poovar) | 5 | Deputy Director Rank officer |
| TOTAL | 12 | |

Methodology and schematic representation of the strategy under the PHIs



| Healthcare Institutions in Coastal Zones – Thiruvananthapuram | | | | | |
|---|------------|------|------------|---------|----------|
| Institution | Category | Zone | Population | Under 5 | Above 60 |
| CHC Anchuthengu | CHC | 1 | 20996 | 1005 | 2639 |
| PHC Perumathura | PHC | 1 | 27033 | 2029 | 3789 |
| PHC, Puthukuruchi | PHC | 1 | 53279 | 3854 | 6891 |
| PHC Veli | PHC | 1 | 19500 | 548 | 5624 |
| Coastal Speciality, Valiyathura 24*7 | SPECIALITY | 2 | 23946 | NR | NR |
| CHC Vizhinjam | CHC | 2 | 133429 | 7607 | 40000 |
| CHC Poonthura | CHC | 2 | 31985 | 2369 | 1014 |

| | | | | | |
|----------------------------|-----|---|--------|-------|-------|
| CHC Poovar | CHC | 3 | 21006 | 1387 | 3891 |
| CHC Pulluvila | CHC | 3 | 34828 | 3560 | 3256 |
| PHC Pozhiyoor | PHC | 3 | 33500 | 2387 | |
| PHC Kottukal | PHC | 3 | 36345 | 2054 | 4361 |
| PHC Mukkola (Vizhinjam) | PHC | 3 | 49836 | 3205 | 12138 |
| | | | 485683 | 30005 | 83603 |

III K REVERSE QUARANTINE (PARIREKSHA) CENTRE AT VALLAKKADAV

Reverse Quarantine is a key aspect in the control of Covid-19, specifically Elderly populations. Limiting the exposure of vulnerable groups to the virus is the essence of reverse quarantine. To address this, the National Health Mission in association with Kerala Social Security Mission(KSSM) established the first reverse quarantine centre (PARIREKSHA) at Sidha Hospital Vallakadav, Thiruvananthapuram with 25 beds. KSSM will support 4 doctors & 8 nurses and food for the centre through Kudumbasree. NHM posted two NHM Palliative care Nurse, one Physiotherapist, Pharmacist and other support staff. IEC campaigns like bit notice distribution, posters at public places, etc were initiated as part of this campaign.

III L Psycho Social Support in containment zones

As the number of persons in containment zones are rapidly increasing, there has been an exponential increase in psychosocial distress cases. Stress and anxiety related to fear of illness, fear of spread to family members, loneliness in isolation room, uncertainty and wait for the blood results, sleep impairment, stigma issues, depressive symptoms, timing and quantity of food, medical needs, facilities in institution are the most commonly reported psychosocial issues.

Taluk-level Quick Response Force:

1. Psychiatrist
2. Post Graduate in Psychiatry and
3. Psychiatric Social Worker/ Clinical Psychologist

Protocol

- *The team should work in liaison with the concerned Taluk charge Medical officers.*
- *Should ensure psychosocial support to all persons in containment zones in the Taluk, either through telephonic consultation/ in person.*
- *Start medications for patients requiring pharmacological support.*
- *Refer patients requiring admission to Psychiatric hospitals in the district as per need.*
- *Clinical psychologist / Psychiatric social worker in the team should take steps to address the social issues reported by the patient.*
- *Share the reports to District PSS team and Taluk Medical Officer daily in the reporting format attached.*

III M -e-Sanjeevani Telemedicine

The people residing in the containment zones should not be deprived of the necessary services which they require to sustain their optimum health during this hardship. When social distancing is among the major measures used to fight COVID-19 pandemic, telehealth is stepping-up as a key technology for safe and efficient communications. The World Health Organization mentioned telemedicine among essential services in "strengthening the Health Systems Response to COVID-19" policy. The state has identified the eSanjeevani platform as an opportunity to render quality medical services to the public. General OPD services are available every day from 8 AM to 8 PM.



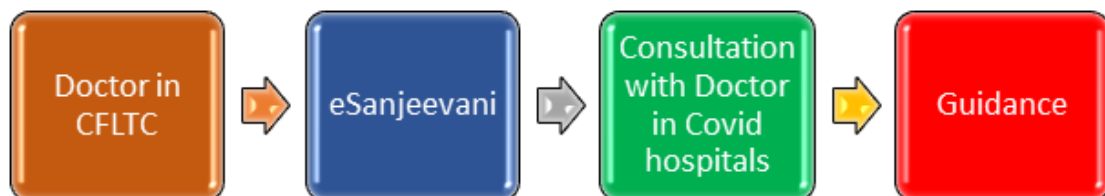
Specialty services were provided by the doctors from pioneer

institutes such as RCC, MCC, SCTIMST, IID, IMHANS. The specialty services are available during the schedule mentioned below:

- Non-Communicable Diseases (NCD) OPD: Tuesday & Thursday: 2:00 PM to 4:00 PM
- Child Development Services (CDS) OPD IMHANS: Tuesday: 10:00 AM to 12:00 PM
- Adult Psychiatry OPD IMHANS: Wednesday: 10:00 AM to 12:00 PM
- Malabar Cancer Centre (MCC) Oncology (Surgical/Head & Neck/Medical/Breast &Gynaec/ClinicalHematology/RespiratoryMedicine/Pediatric/Radiation/Dentistry & Rehabilitation) OPD: Thursday & Friday: 3:00 PM to 4:00 PM
- Cochin Cancer Research Centre (CCRC) Oncology (Head & Neck/Medical/Gynaec/Radiation) OPD: Monday to Friday: 9:00 AM to 12:00 PM.

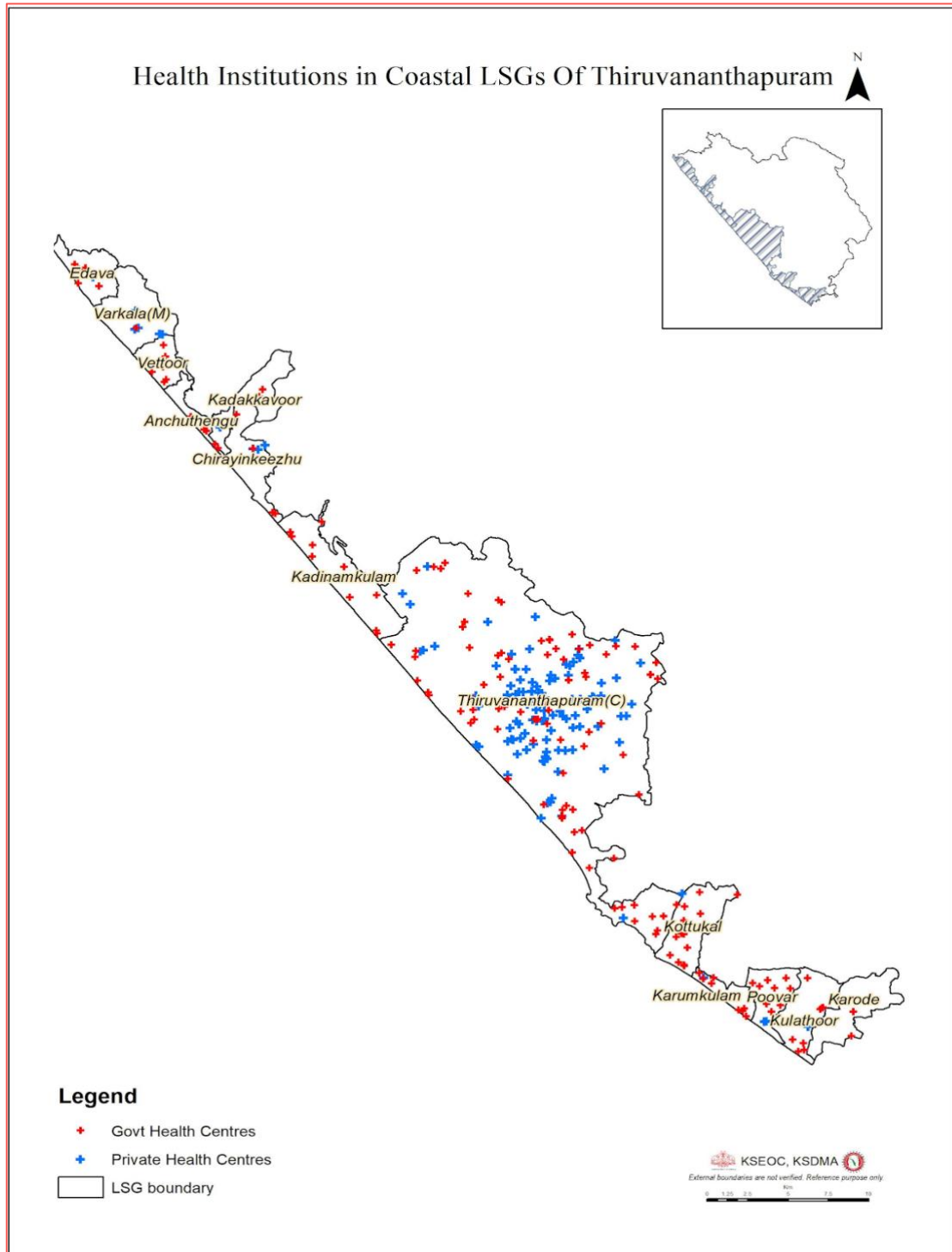


CFLTCs will be linked with MCH and GH COVID hospitals for the doctor to utilise teleconsultationservices.



ANNEXURE 1

HEALTH INFRASTRUCTURE – GOVT



| Government Health Institutions in Trivandrum | | | | | | | |
|--|------------------------|-------------|----------------|-------------------|-------------|----------------|-------------------|
| Sector | Number of Institutions | Total beds | Total ICU beds | Total ventilators | COVID beds | COVID ICU beds | COVID Ventilators |
| COVID Hospital | 2 | 3522 | 394 | 148 | 1008 | 273 | 148 |
| DME | 1 | 1152 | 38 | 51 | 100 | 10 | 6 |
| DHS | 40 | 3661 | 4 | 9 | 52 | 0 | 0 |
| Grand total | 43 | 8335 | 436 | 208 | 1160 | 283 | 154 |

| | Name of Institution | Total beds | Total ICU beds | Total ventilators | COVID beds | COVID ICU beds | COVID Ventilators |
|----|------------------------|------------------|----------------|-------------------|------------|----------------|-------------------|
| | COVID Hospitals | SECTION 1 | | | | | |
| 1 | MCH Trivandrum | 2750 | 369 | 135 | 788 | 248 | 135 |
| 2 | GH Trivandrum | 772 | 25 | 13 | 220 | 25 | 13 |
| | | | | | | | |
| | Total COVID | 3522 | 394 | 148 | 1008 | 273 | 148 |
| | DME Hospitals | SECTION 2 | | | | | |
| 3 | SAT Hospitals | 1152 | 38 | 51 | 100 | 10 | 6 |
| | | | | | | | |
| | Total DME | 1152 | 38 | 51 | 100 | 10 | 6 |
| | DHS Hospitals | SECTION 3 | | | | | |
| 4 | GH Neyyatinkara | 436 | 0 | 2 | 14 | 0 | 0 |
| 5 | DH Nedumangad | 225 | 0 | 1 | 9 | 0 | 0 |
| 6 | DMH Peroorkada | 531 | 0 | 2 | 7 | 0 | 0 |
| 7 | TH Chirayinkeezh | 243 | 0 | 1 | 7 | 0 | 0 |
| 8 | W and C Thycaud | 428 | 4 | 2 | 0 | 0 | 0 |
| 9 | THQH Parassala | 226 | 0 | 0 | 6 | 0 | 0 |
| 10 | TH Attingal | 60 | 0 | 0 | 9 | 0 | 0 |
| 11 | THQ Varkala | 64 | 0 | 0 | 0 | 0 | 0 |
| 12 | CDH Pulayanarkotta | 236 | 0 | 1 | 0 | 0 | 0 |

| | | | | | | | |
|----|-----------------------|-----|--|--|--|--|--|
| 13 | W & C | 352 | | | | | |
| 14 | THQH Malayinkeezhu | 58 | | | | | |
| 15 | TH Fort | 76 | | | | | |
| 16 | TH Nemom | 61 | | | | | |
| 17 | TH Vithura | 65 | | | | | |
| 18 | CHC Iranimuttom | 35 | | | | | |
| 19 | CHC Palode | 31 | | | | | |
| 20 | CHC Kallara SCP | 12 | | | | | |
| 21 | CHC Vakkom | 16 | | | | | |
| 22 | CHC Poovar | 40 | | | | | |
| 23 | CHC Manamboor | 24 | | | | | |
| 24 | CHC Perumkadavila | 12 | | | | | |
| 25 | CHC Vellanadu | 30 | | | | | |
| 26 | CHC Vizhinjam | 30 | | | | | |
| 27 | CHC Vellarada | 25 | | | | | |
| 28 | CHC Puthenthopu | 18 | | | | | |
| 29 | CHC Kanyakulangara | 12 | | | | | |
| 30 | CHC Pulluvilla | 25 | | | | | |
| 31 | CHC Kesavapuram | 52 | | | | | |
| 32 | CHC Vilappil | 30 | | | | | |
| 33 | CHC Aryanad | 20 | | | | | |
| 34 | CHC Anchuthengu | 0 | | | | | |
| 35 | CHC Venpakal | 52 | | | | | |
| 36 | CHC Andoorkonam | 10 | | | | | |
| 37 | FHC Poonthura | 24 | | | | | |
| 38 | FHC Kattakada | 30 | | | | | |
| 39 | FHC Pozhiyoor | 10 | | | | | |
| 40 | FHC Kunnathukal | 14 | | | | | |
| 41 | FHC Vamanapuram | 12 | | | | | |
| 42 | FHC Balaramapuram | 12 | | | | | |

| | | | | | | | |
|--------------------|--|------|-----|-----|------|-----|-----|
| 43 | Coastal speciality hospital, Valiyathura, TVPM | 24 | | | | | |
| Total DHS | | 3661 | 4 | 9 | 52 | 0 | 0 |
| Grand total | | 8335 | 436 | 208 | 1160 | 283 | 154 |

| SI NO | Type Of HEALTH FACILITY | Number of ICU beds | Number Ventilators | Number of Multipara monitors | Number of Pulse oxymeter | Number of Oxygen cylinders | | |
|-------|-------------------------|--------------------|--------------------|------------------------------|--------------------------|----------------------------|-----------------|-----------------|
| | | | | | | Liquid Oxygen | D type cylinder | B type cylinder |
| 01 | MCH & GH | 164 | 143 | 381 | 93 | 20Kilo litter | 196 | 111 |
| 02 | TH & others | 00 | 07 | 100 | 50 | | 30 | 226 |

| SI No | Type of Facility | Number of ICU ventilators | Number of Non Invasive Ventilators(CPAP & BIPAP) | High flow nasal canula | Number of Pulse oxymeter | Number of Oxygen cylinders(D type) |
|-----------|------------------|---------------------------|--|------------------------|--------------------------|------------------------------------|
| 01 | MCH | 58 | 06 | 17 | 50 | 60 |
| 02 | GH | 10 | 01 | 06 | 15 | 12 |

Equipment Availability

| Sl. No. | Facility Type | Health Facility Name | BP Apparatus | Needle Destroyer | ECG Machine Single Channel | Semi Automatic Biochemistry Analyzer | Autoclave | Hematology Analyzer - 3 part | Suction Apparatus | Digital BP Apparatus | UPS | Multiparameter Monitor | ECG Machine 3 Channel |
|---------|---------------|----------------------|--------------|------------------|----------------------------|--------------------------------------|-----------|------------------------------|-------------------|----------------------|-----|------------------------|-----------------------|
| 1 | PHC | 24X7 PHC POZHIYOOR | 10 | 3 | 1 | 1 | 1 | | | | | | |
| 2 | PHC | 24X7 PHC VALIYATHURA | 15 | 6 | 1 | 1 | 1 | 1 | 3 | 4 | | | |
| 3 | CHC | CHC ANCHUTHENGU | 14 | 4 | | 1 | 3 | | 3 | | | | |
| 4 | CHC | CHC POONTHURA | 5 | 4 | | | 1 | 1 | | 3 | | | |
| 5 | CHC | CHC POOVAR | 11 | 5 | 1 | 3 | | 1 | 2 | | | | |
| 6 | CHC | CHC PULLUVILA | 7 | 1 3 | 1 | 2 | 1 | 1 | 4 | | 3 | | |
| 7 | CHC | CHC VIZHINJAM | 28 | | 2 | 1 | 1 | 1 | 3 | | | 1 | 1 |
| 8 | PHC | PHC KOTTUKAL | 23 | 4 | 1 | | | 1 | | 8 | | | |
| 9 | PHC | PHC MUKKOLA | 21 | 2 | | | | | | 6 | | | |
| 10 | PHC | PHC PERUMATHURA | 3 | 3 | | | 1 | | | | | | |
| 11 | PHC | PHC PUTHUKURICHY | 3 | | | | | | | 4 | | | |
| 12 | PHC | PHC VELI | 7 | 1 | 1 | | | | | | | | |

Coastal Government Healthcare Institutions – Thiruvananthapuram

| | Institution | Population | Panchayat | Sub-centers | Wards |
|--------|--------------------------------------|------------|---------------|-------------|-------|
| ZONE 1 | CHC ANCHUTHENGU | 20996 | ANCHUTHENGU | 4 | 13 |
| | PHC, PUTHUKURUCHI | 53279 | KADINAMKULAM | 5 | 22 |
| | PHC PERUMATHURA | 53279 | CHIRAYINKEEZH | 5 | 18 |
| ZONE 2 | PHC VELI | 19500 | CORPORATION | 5 | 100 |
| | COASTAL SPECIALITY, VALIYATHURA 24*7 | 23946 | CORPORATION | 0 | 100 |
| | CHC POONTHURA | 31985 | CORPORATION | 0 | 100 |
| | CHC VIZHINHAM | 133429 | VENGANOOR | 8 | 19 |
| ZONE 3 | PHC MUKKOLA (VIZHINHAM) | 49836 | CORPORATION | 9 | 100 |
| | FHC KOTTUKAL | 36345 | KOTTUKAL | 10 | 18 |
| | CHC PULLUVILA | 34828 | KARIMKULAM | 8 | 17 |
| | CHC POOVAR | 21006 | POOVAR | 10 | 14 |
| | CHC POZHIYOOR | 33500 | KULATHOOR | 7 | 19 |

ANNEXURE 2

HEALTH INFRASTRUCTURE – PRIVATE

| Private Hospitals – Thiruvananthapuram | | | | | | | |
|--|--|-------------|-------------------------|-----------------|--------------------|-----------------------------|--------------------------|
| S No. | Name of the Hospital | No.of Wards | No.of Beds in the Wards | No. of ICU Beds | No. of Ventilators | Name of the Nodal Person | Contact number |
| 1 | KIMS Hospital, Thiruvananthapuram | 4 | 365 | 168 | 47 | Dr.Deepak | 9895223210 |
| 2 | SreeGokulam Medical College, Venjaramoodu | 8 | 700 | 105 | 16 | Dr. Smitha Kiran | 6282402336 |
| 3 | NIMS Hospital, Thiruvananthapuram. | 6 | 150 | 40 | 12 | Dr.ManjuThampi | 9847101301 |
| 4 | PRS Hospital, Thiruvananthapuram. | 34 | 72 | 35 | 14 | Dr.Mariya | 9562387418 |
| 5 | Ananthapuri Hospital, Thiruvananthapuram. | 110 | 110 | 80 | 15 | Dr.Marthandan Pillai | 9847062019 |
| 6 | Cosmopolitan Hospital, Thiruvananthapuram. | 2 | 74 | 36 | 0 | Dr.Indu (ICO) | 0471-25121146,7510349172 |
| 7 | SK Hospital, Thiruvananthapuram. | 10 | 150 | 20 | 10 | Dr Ravi | 9446060843 |
| 8 | CSI Karakonam | 23 | 695 | 0 | 0 | Dr. S Baburaj Dr. Shibu raj | 9447154448 9446177462 |
| 9 | Rukmini Devi Memorial Hospital, Vellarada | 4 | 160 | 5 | 1 | Dr. C A Mohanan | 9447042027 |
| 10 | SP Fort Hospital | 5 | 15 | 22 | 4 | John Sebastian | 8075800508 |
| 11 | Saraswathy Hospital, Parassala | 5 | 70 | 18 | 2 | Mr. Praveen.P | 9447023865 |
| 12 | CSI Mission, Kazhakkuttom | 1 | | 3 | 1 | Dr.Pious | 9446700106 |
| 13 | SRI RAMAKRISHNA ASHRAMA HOSPITAL | 10 | 122 | 3 | 0 | Dr.SreeKumar | 9447784766 |
| 14 | Rollands Hospital | 2 | 16 | 34 | 0 | Dr.SanthoshRollands | 9995011535 |
| 15 | SivagiriSree Narayana Medical Mission Hospital | 4 | 54 | 7 | 1 | Dr. Abhilash Raman | 9447386724 |
| 16 | KTCT Hospital | 2 | 200 | 10 | 0 | Dr. Sabu | 9446453071 |
| 17 | Mamalmultispecialityhospiital | 2 | 50 | 1 | 0 | Dr Sathyanesan | 9446705001 |
| 18 | GG Hospital | 2 | 10 | 36 | 6 | Dr.Sayujsya S Ghosh | 9895403677 |
| 19 | AJ Hospital, Kazhakoottam | 4 | 100 | 1 | 2 | Dr.Aeen | 7034861818 |

| | | | | | | | |
|----|---|---|-----|----|---|-------------------------|--------------------------|
| 20 | SUT Academy of Medical Sciences | 8 | 350 | 16 | | Dr Antony | 8281625407 |
| 21 | SUT Pattom | 1 | 7 | 52 | 8 | Dr Mrinal | 7591900609 |
| 22 | Govindan's | 3 | 40 | 1 | 1 | Dr.Carolin | 8762413114 |
| 23 | Al Arif | 4 | 34 | | 0 | | |
| 24 | Leela Ravi | 3 | 20 | 0 | 0 | Dr.LeelaDr. Arun | 9447000780 9995122088 |
| 25 | Pro Care | 1 | 10 | 3 | 1 | Jineesh Raj | 0470-2838888 |
| 26 | Parvathy | 2 | 10 | 0 | 0 | Dr Karthika | 9947064300 |
| 27 | SP Parassala | 2 | 60 | 14 | 2 | Anuraj | 81119 05422 |
| 28 | St. John's Pirappancode | 2 | 80 | 0 | 0 | Ajay.K | 9447656065 |
| 29 | Amar Maternity and Fertility Centre | 2 | 3 | 12 | 0 | Dr.P.Radhakrishnan Nair | 9447162977 |
| 30 | Anadiyil Hospital | 0 | 0 | 0 | 0 | Subhash John. S | 9947182580 |
| 31 | Jubilee Memorial Hospital | 1 | 20 | 5 | 2 | Colin | 7907025748 |
| 32 | LORDS HOSPITAL | 0 | 10 | 6 | 2 | Dr. C S Vijayan | 9847254693 |
| 33 | TSC Kazhakoottam | 1 | 5 | 6 | 0 | M.SULFIKAR | 0471-2413125 |
| 34 | VENAD | 3 | 15 | 0 | 0 | Dr.K.P.Ayyappan | 9447439715 |
| 35 | SUT Mother and Child | 2 | 10 | | 1 | Dr. Nishad | 9645366479 |
| 36 | SANTHWANA HOSPITAL | 2 | 7 | 2 | 0 | Mr. Gopakumar. R | 9072887780 |
| 37 | Shifa Medical Centre | 2 | 20 | 3 | 0 | Dr. E. Abdul Salim MS | 9846046936 |
| 38 | RV HOSPITAL | 4 | 16 | 3 | 0 | Dr.B.Ramachandran | 9495541807 |
| 39 | Nirmala Hospital, ChallaKuzhy | 2 | 6 | 0 | 0 | Dr. Abhilash | 9447309774 |
| 40 | MEDITRNA HOSPITAL | 0 | 0 | 9 | 2 | Dr.Achyuth | 8075202495 |
| 41 | Karunasai De-Addiction & Mental Health Research Institute | 5 | 10 | 0 | 0 | Dr. Veena G. Thilak | 9446208131 |
| 42 | GOWREESHA HOSPITAL | 3 | 25 | 0 | 1 | Sreekumar P | 9447045454 |
| 43 | Gitanjali Eye and ENT Hospital | 1 | 6 | 2 | 1 | Dr. Arun Nair | 9446054480 |
| 44 | Attukal Devi hospital | 2 | 12 | 5 | 0 | Prasanth | 8289960423 |
| 45 | Anupama Hospital | 3 | 22 | 0 | 0 | Dr. Arya S. Jayan | 9895195207 |
| 46 | AL NEYADI HOSPITAL | 5 | 15 | 3 | 0 | Swati | 8129080559 |
| 47 | Archana Hospital | 1 | 3 | 0 | 0 | Anand Rex | 9567666861 |
| 48 | BNV Hospital | 2 | 8 | 0 | 0 | Dr.Sudheesh | 9895180410 |
| 49 | Ray Mayo Clinic | 1 | 15 | 0 | 0 | Dr. Amish Ray | 9496811430 |
| 50 | Sakti Hospital | 1 | 10 | 0 | 0 | Dr. Rani | 9495630848 |

| | | | | | | | |
|----|--|---|----|---|---|-------------------------|------------|
| 51 | Samadh | 1 | 20 | 0 | 0 | Dr. Ram gopal M Pillai | 9496561666 |
| 52 | Upasana Hospital | 1 | 2 | 0 | 0 | Dr. Amar Fettle | 9447471456 |
| 53 | V.V. Clinic, Attingal | 0 | 0 | 0 | 0 | | |
| 54 | TRAVANCORE | 2 | 10 | 0 | 0 | Dr. Robert Justin Raj | 9447551807 |
| 55 | St. Anns Nursing Home Pettah | 2 | 10 | 0 | 0 | Sr. Lincy | 8301878953 |
| 56 | RK HOSPITAL MANACAUD | 1 | 10 | 0 | 0 | Dr. Yousuf | 9995342189 |
| 57 | PRAN FERTILITY AND WELL WOMAN CENTRE | 1 | 6 | 0 | 0 | Sarathkumar | 9895863954 |
| 58 | Mangala Medical Centre | 0 | 0 | 0 | 0 | Shamseena | 9995360141 |
| 59 | Kalyan Hospital | 2 | 6 | 0 | 0 | Dr. M.S. Thurivaryar | 9847060309 |
| 60 | Divya Prabha Eye Hospital | 1 | 6 | 0 | 0 | Dr. Devin Prabhaar | 9746545544 |
| 61 | BROTHERS MEDICAL CENTRE AND DIAGNOSTIC SERVICES | 2 | 5 | 0 | 0 | Arun | 8304850354 |
| 62 | Ahalia Foundation Eye Hospital | 1 | 9 | 0 | 0 | | 9496396701 |
| 63 | CREDENCE HOSPITAL | 1 | 6 | 8 | 2 | Dr. Ashok Divakar | 9072097979 |
| 64 | Providence Ulloor | 0 | 0 | 0 | 0 | Ben Johnson | 9447697678 |
| 65 | Valsala Nursing Home | 1 | 5 | 0 | 0 | Dr. Roy Mathew | 9846010620 |
| 66 | M S Sarkar Dispensary | 0 | 0 | 0 | 0 | S K Sarkar | 9846316661 |
| 67 | WELCARE | 2 | 8 | 0 | 0 | Dr. R Ashish Parameswar | 9387818222 |
| 68 | Wills Hospital (O P ONLY) | 0 | 0 | 0 | 0 | Dr. M.K. Wills | 9496746165 |
| 69 | Cvc Anand Eye Hospital Clear Vision Centre (O P ONLY) | 0 | 0 | 0 | 0 | DR, Mahesh G K | 9746444467 |
| 70 | DR. ANUPS INSIGHT EYE HOSPITAL | 1 | 10 | 0 | 0 | Dr. Anup Das | 7902990000 |
| 71 | P R Medical centre | 2 | 8 | 0 | 0 | SUJITH S V | 9446437887 |
| 72 | KANDALA SAHAKARANA HOSPITAL | 3 | 16 | 0 | 0 | Dr. George Jacob | 9447131323 |
| 73 | Chirayankeezhu Medical Center (O P) | 0 | 0 | 0 | 0 | Dr. C Jayakumar | 9446751441 |
| 74 | Anithara Hospital, Poovar | 2 | 20 | 0 | 0 | Dr. Salim | 9447752837 |
| 75 | Chaithanya Eye Hospital & Research Institute, Keshavadasapuram | 0 | 0 | 0 | 0 | Dr Dhanya V Nair | 9020173156 |
| 76 | Priya Multispeciality Dental Clinic | 1 | 5 | 0 | 0 | PADMAKUMAR S | 9349911811 |

| | | | | | | | |
|----|--|------------|-------------|------------|------------|-------------------------|------------|
| 77 | Dr.Agarwals Eye Hospital (O P ONLY) | 1 | 2 | 0 | 0 | Dr.Adharsh | 9895145868 |
| 78 | Jayanthi Fertility and Surgical Centre | 1 | 3 | 2 | 0 | Dr. Jayanthi | 9447311047 |
| 79 | Trinity Hospital | 1 | 4 | 0 | 0 | Dr. Akshaya Prasad | 8547700834 |
| 80 | CURE - Centre For Urological Research and Evaluation | 0 | 0 | 0 | 0 | Dr. Vinod K V | 9387456700 |
| 81 | Dr. KPR Nair, Homeopathy Clinic | 0 | 0 | 0 | 0 | Dr.Sreesankar | 7012854242 |
| 82 | Gayathri Clinic, Murukumpuzha | 0 | 0 | 0 | 0 | Dr.Beena | 9495820378 |
| 83 | Kidangoor's Clinic | 0 | 0 | 0 | 0 | Dr. Pradeep Kidangoor | 9846168127 |
| 84 | National Chest Clinic | 0 | 0 | 0 | 0 | Dr. Khader | 9895147025 |
| 85 | Nirmala Hospital,Vettukad | 0 | 0 | 0 | 0 | Dr. Sreejith | 9947157775 |
| 86 | Jabbar Sanjeevi Ayurveda Vaidyasala | 0 | 0 | 0 | 0 | Dr.Raseena | 9495550204 |
| 87 | Kaniyapuram Hospital | 0 | 0 | 0 | 0 | | |
| 88 | Kamala Clinic (O P ONLY) | 0 | 0 | 0 | 0 | Sister Priya | 9847266243 |
| 89 | Ansar Hospital | 0 | 0 | 0 | 0 | Dr.NeelakantaSarma | 9446704441 |
| 90 | Arumana Hospital | 0 | 0 | 0 | 0 | Hari Krishnan (Manager) | 9037760059 |
| | Total | 337 | 4133 | 776 | 154 | | |

- ***Out of these 90 private hospitals, 15 private hospitals have offered their institution for COVID patients referred by Government. The other hospitals should be on boarded at the earliest***

| | | |
|---|---|---|
| 1 | KIMS Hospital, Thiruvananthapuram | 4 critically ill patients and 10 mild symptom patients only |
| 2 | SreeGokulam Medical College, Venjaramoodu | 10 beds, 4 ICU beds and 1 ventilator |
| 3 | Ananthapuri Hospital, Thiruvananthapuram. | 6 rooms, 2 ICU beds |
| 4 | SP Fort Hospital | Nursing Hostel can be provided |
| 5 | CSI Mission, Kazhakkuttom | 5 beds can be provided |
| 6 | Mamalmulti speciality hospital | willing - after august 15th they will allocate 20 beds |

| | | |
|----|--------------------------------------|--|
| 7 | AJ Hospital, Kazhakoottam | willing to join, only limited infrastructure are there. Ready to issue 10 beds |
| 8 | SUT Pattom | 5 beds |
| 9 | TRAVANCORE | Limited facilities |
| 10 | RK HOSPITAL MANACAUD | Can facilitate 100 beds separately |
| 11 | Mangala Medical Centre | 15 rooms can be provided |
| 12 | Anithara Hospital, Poovar | 25 beds |
| 13 | Mariyanilayam Hospital, Adimalathura | 10 beds, 4 ICU beds and 1 ventilator |
| 14 | Holy Cross Hospital, Shangumugham | 30 beds |
| 15 | Fathima Hospital, Thumba | 15 beds |

ANNEXURE 3

CFLTC DETAILS

| List of CFLTCs – Thiruvananthapuram | | | | | |
|---|---------|-----------------------|------------|-----------------|----------------|
| CFLTC | Level | COVID hospital | CFLTC Beds | Nodal officer | Contact number |
| Govt Homeo Medical College | Level 1 | GH Thiruvananthapuram | 70 | Dr. Sajeev | 9074271007 |
| CSI Med.Clgkarakkonam | Level 1 | MCH Thiruvanthapuram | 150 | | |
| SR Medical college Varkala | Level 1 | GH Thiruvananthapuram | 300 | Dr. Ziyad | 9847444552 |
| IMG | Level 1 | GH Thiruvananthapuram | 94 | Dr. Anoop | 9400643477 |
| SUT Hospital Vattappara | Level 1 | MCH Thiruvanthapuram | 250 | Dr.Harikrishnan | 9605818515 |
| St Thomas Hr Sec Poonthura | Level 2 | GH Thiruvananthapuram | 110 | Dr. Jyothi | 9446064418 |
| G V Raja | Level 2 | GH Thiruvananthapuram | 48 | | |
| College of Agriculture hostel Vellayani | Level 2 | THQH Malayinkeezhu | 100 | | |

| | | | | | |
|--|--------------|-----------------|-------------|--|--|
| SN Training College Nedukandam | Level 2 | CHC Anchuthengu | 40 | | |
| Sree Krishna College of Pharmacy Parassala | Level 2 | THQH Parassala | 100 | | |
| | 5 5 | | 1262 | | |

ANNEXURE 4

HEALTH POSTS – COVID AND NON-COVID MANAGEMENT

a) **Scope:** *The purpose of this document is for the protection of vulnerable groups like Elderly, Persons with Comorbidities, Pregnant women, Children less than 5 years & Migrants and also to ensure COVID 19 control to ensure that all stakeholders have the same understanding of the risks they face in view of COVID 19 and to ensure these high risk groups receive adequate support in all situations when required. In that respect, the SOPs define the roles, responsibilities and procedures in making decisions about the high-risk groups and provide a common basis for all stakeholders on how to identify and determine priorities for response and support.*

| Serial no | Vulnerable groups | Vulnerability factors | Stake holders |
|------------------|--|--|--|
| 1 | Elderly | Sensitivities related to medications they may be taking, immune response, and physiology | Dept of Health, Dept of Social Justice |
| 2 | Persons with comorbidities & Immunocompromised | Exacerbation of existing comorbidities, need for replenishment of Medicines & other medical supplies | Dept of Health |
| 3 | Pregnant women | Pregnant women with High risk pregnancy, Regular check-ups, any medical or surgical emergencies, Immunisation, Transportation for delivery | Dept of Health, Social Justice |
| 4 | Infants & Children less than 5 years | Malnutrition, Co morbidities, Immunisation, any medical or surgical emergencies | Dept of Health, Social Justice |
| 5 | Migrants | Poor housing quality, overcrowding, Malnutrition, lack of earnings, history of | Dept of Labour, Dept of Health |

| | | | |
|----------|-----------------------|---|--|
| | | travel, increased risk of Malaria, reduced adaptive capacity, language issues | |
| 6 | Malnourished children | May worsen comorbidities, Immunisation | Dept of Social Justice, Dept of Health |

| Serial no | Vulnerable groups | Total numbers |
|------------------|--|------------------------|
| 1 | Elderly | 83,603 |
| 2 | Persons with comorbidities & Immunocompromised | 3478 |
| 3 | Pregnant women | 2507 |
| 4 | Infants & Children less than 5 years | 30,005 |
| 5 | Migrants | -117(migrant children) |
| 6 | Malnourished children | - |

b) Strategy for Implementation

Plan of action :Sub Centres are identified as the basic unit for management of Cluster control & High risk groups.3-4 member Rapid Response Team groups are to be formed comprising Anganwadi teachers, Kudumbashree members and Volunteers under the supervision of JHI /JPHN. These Task forces are to be formed at the ward level. Transportation facility in emergency situations needs to be arranged by funds from the Local Self Government /ward level sanitation committee or any other funds earmarked for COVID 19 Control.

Since each sub centre comes under a Primary health centre /CHC, the Medical officer in charge of these PHC/CHC will function as the convener of the Special task force groups and President of the concerned Local Self Government as the Chairman of the committee. Other departments of the concerned LSG'S , NGO's, Private health institutions and other stakeholders will be functioning as members and will be actively involving in the daily COVID 19 control activities and the management of high risk groups in the

Reporting:Reporting of activities related to Cluster control/high risk population to be compiled by Dept of Health and to be send daily to concerned departments

| Serial no | Vulnerable groups | Total numbers | Special task force for monitoring |
|------------------|--|----------------------|--|
| 1 | Elderly | 83,603 | Anganwadi teachers, Kudumbashreemembers , volunteers |
| 2 | Persons with comorbidities & Immunocompromised | 3478 | Anganwadi teachers, Kudumbashreemembers , volunteers |

| | | | |
|----------|--------------------------------------|-----------------------------|--|
| 3 | Pregnant women | 2507 | Anganwadi teachers, Kudumbashreemembers , volunteers |
| 4 | Infants & Children less than 5 years | 30,005 | Anganwadi teachers, Kudumbashreemembers , volunteers |
| 5 | Migrants | - 117(migrant children) | Anganwadi teachers,Kudumbashree members , volunteers |
| 6 | Malnourished children | - | Anganwadi teachers,Kudumbashree members, volunteers |

c) **Management of Non-COVID healthcare**

Essentials of NON COVID management are:

- *Management of communicable diseases, particularly vaccination;*
- *Services related to reproductive health, including care during pregnancy and childbirth;*
- *Care of vulnerable populations, such as young infants and older adults;*
- *Provision of medications and supplies for the ongoing management of chronic diseases,including mental health conditions;*
- *Continuity of critical inpatient therapies;*
- *Management of emergency health conditions and common acute presentations that require time-sensitive intervention;*
- *Auxiliary services, such as basic diagnostic imaging, laboratory services, and blood bankservices;*

d) **Plan of Action for NON COVID diseases:**

Vector borne diseases like Malaria, Chikungunya, Dengue, Japanese Encephalitis are a threat to human health. High/medium turbid coastal lagoons and inland water-logged wetlands with aquatic vegetation have significant effect on the incidence of chikungunya while dengue is influenced by high turbid coastal beaches and malaria by medium turbid coastal beaches. The high turbidity in water is due to the urban waste discharge namely sewage, sullage and garbage from the densely populated cities and towns. The large extent of wetland is low lying area favours the occurrence of vector borne diseases.

Other diseases like Leptospirosis & Acute Diarrhoeal diseases which show an increasing trend in the rainy season along with Vector borne diseases too add to the disease burden of the coastal community. In view of the present COVID 19 clusters seen along the coastal regions of Trivandrum, huge burden has befallen on the health team for management of COVID and Non COVID diseases.

Health team of the Govt Health Institutions also has to manage Non COVID cases along with COVID 19 cases. RRT Team of Multipurpose workers (JHI/JPHN) and ASHA's under the supervision of HS/PHN/HI/LHI is required to conduct regular vector surveys, Integrated vector management, Chlorination of wells, Rodent control measures and continuous behavioural change communication in the zones identified in coastal regions to prevent morbidity and mortality due to Non COVID illness.

Sub Centres are considered as the basic unit of activities. Ward health sanitation committees are to coordinate the NON COVID activities of a particular ward. Asha's will coordinate the activities of the Ward health sanitation committee with other departments. Asha's will be assisting the field staff in NON COVID control activities. Outbreak investigation, Death investigation must be done promptly in COVID 19 Clusters and in all deaths due to non COVID, mandatory COVID test must be done.

e) **Reproductive, Maternal, New Born, Child and Adolescent Health services**

1. Ante natal services

a. Routine Antenatal Care services

- Pradhan Mantri SurakshitMatritva Abhiyan (PMSMA) and Village Health, Sanitation and Nutrition Day (VHSND) activities, which involve large gathering of beneficiaries could be suspended in view of restricted movements and the need for physical distancing.
- ANC services are to be provided on walk in basis as per standard protocols at the Institution level following physical distancing norms.
- Availability of TD/ IFA/ Calcium during ANC period to be ensured

b. High-risk pregnancy (HRP) tracking and follow up

- JPHN's and ASHAs to list and follow up high risk pregnancies to ensure early detection of complications, referral and follow up.
- ANCs during the last trimester should be prioritized. Telephonic contact should be made by ASHAs / JPHN's to High risk pregnancies during last trimester to ascertain status and home based follow up to be provided if necessary. (ASHAs / JPHN's to follow all precautions while visiting the household).

2. Intrapartum Services

- Ensuring safe institutional delivery-
 - The due list of all pregnant women with Expected Date of Delivery (EDD) up to next three months (last trimester) should be maintained at PHC level for active follow up.
 - Ensure availability of Misoprostol and disposable delivery kits for clean deliveries at home with ASHAs, if needed, but encourage appropriate referral for institutional delivery.

➤ Each pregnant woman to be linked with the appropriate health facility for delivery (as per antenatal status and doctor's advice) by the JPHN / CHC/PHC MO.

➤ Identification of BeMONC centres for referral of high risk pregnancy and list of such institutions to be communicated for referral of high risk pregnancies

➤ Availability of dedicated ambulances for COVID and non-COVID patients must be ensured at the district/ block level. Non-COVID patients must be transferred in non COVID ambulances only.

➤ All Blood banks/Blood Storage Units need to be kept functional.

3. Postpartum and new-born care:

- Ensure availability of IFA and calcium tablets during PNC period.

- In case of home deliveries, immediate visits to be made by JPHN/ASHA or Medical officer to assess the health of the woman and new-born. Timely referral in case of any

complication should be facilitated using the dedicated non-COVID ambulances.

4. Family Planning Services and Safe Abortion services

➤ Contraceptives (Condoms/ Oral Contraceptive Pills MALA/Chhaya, Injectable Contraceptive Antara /Emergency Contraceptives) are to be provided to eligible couples /others needing them through all Public Health Facilities, including through ASHA/Field staff and PHC for easier access.

➤ Information about delayed availability of IUCDs and sterilization services until routine services resume should be displayed at all health facilities. Beneficiaries must be counselled for adoption of contraception and provided with temporary methods of other contraception methods like Condoms / OCP/ injectable etc. in the interim period.

➤ Medical and surgical abortion services should be ensured at appropriate facility level, with appropriate infection prevention measures including counselling for post abortion care and provision of contraception.

5. Child Health

a. Immunization services (including for pregnant women)

➤ Birth doses for institutional deliveries to continue uninterrupted as these beneficiaries are already in the health facilities.

➤ Immunization services are to be provided at facilities wherever feasible, for walk-in beneficiaries.

➤ Every opportunity is to be utilized for vaccinating beneficiaries if they have already reported at facilities. Subsequent vaccination could be provided at PHC or in additional outreach sessions.

➤ Fixed site vaccination and VPD surveillance should be implemented while maintaining physical distancing measures and taking appropriate infection control precautions.

➤ Catch-up vaccination should be conducted as soon as the restriction is eased. This will require tracking and follow-up with individuals who missed vaccinations.

➤ Mass vaccinations should be avoided.

b. New-born care and childhood illness management

➤ Home-based new-born care visits to be continued as per schedule by ASHAs following COVID 19 precautions along with visits of RRT. Adequate and appropriate COVID protective equipment should be provided to ASHAs to protect themselves and to prevent infecting others.

➤ Breast feeding practices are to be promoted with early initiation of breast feeding and Kangaroo Mother Care as per MAA/KMC guidelines.

- Admission to SNCU and NBSU are to be continued as per existing guidelines.
- ASHAs may contact the family telephonically to assess health status of the child, especially for cough, cold, fever, breathlessness and diarrhoea. In case of any complication in new-born or young child, ASHAs should consult PHC MO for appropriate referral and management advice.
- Adequate supply of ORS, Cotrimoxazole, Gentamycin, and Amoxicillin at the PHC/CHC, including HWCs should be made available.
- In case of suspected COVID-19 infection in children, they should be referred to the nearest COVID-19 management facility.

c. Management of SAM children

- SAM children with medical complications should be referred to nearby health facility (PHC/CHC) for medical management. For secondary care, the PHC/CHC –Medical Officer may refer the sick SAM children to the DH/Medical college.
- Previously admitted children who are stable and have entered rehabilitation phase may be discharged early with appropriate feeding advice, and provided with oral antibiotics, and supplements except Potassium Chloride (Potklor) and Magnesium.
- For children who cannot be discharged, appropriate infection protocols to be maintained.
- List of SAM children (discharged from NRC) to be shared with Anganwadi centres for prioritizing home-based delivery of Take Home Ration.
- Follow up needs to be done telephonically and only children with medical complications should be called for physical follow up.

d. Adolescent Health

➤ Threemonth supply of weekly iron folic acid supplementation tablets may be dispensed by ASHAs /AWWs for community distribution to adolescent boys and girls.

II. Communicable Diseases

1. Vector Borne Diseases

- Activities such as distribution of Insecticide Treated Nets (ITN) could be postponed till after the lockdown.
- Targeted Indoor Residual Spraying (IRS) in high risk vector borne diseases endemic areas or wherever increase in cases is seen, may be undertaken, in targeted areas after the lockdown. IRS teams should use full personal protective equipment and use sanitizers/soap and water at all operation sites.
- Enhanced fever surveillance and use of rapid diagnostic kits for malaria diagnosis should be undertaken.
- Care should be taken to watch for rise in admissions in dengue cases especially in urban areas where antilarval measures can be undertaken and integrated with the COVID19 surveillance.

2. Tuberculosis

- List of all TB patients should be maintained at the PHC/ SHC level.
- Delivery of DOTS to TB patients through ASHAs/ Field staff/ volunteers to be ensured, closer to the community, with minimum or no travel.
- Routine screening for presumptive TB cases to continue at primary level facilities with diagnostic services to be provided uninterrupted at designated facilities as per advisories issued by National Tuberculosis Elimination Programme.
- Screening for new onset fever/cough/breathlessness and risk communication on COVID19

3. Leprosy

➤ Ensure that all Leprosy patients are with provided uninterrupted drug supplies through Field staff, ASHAs), to ensure continuity of treatment.

4. Viral Hepatitis

➤ Patients on antiviral treatment for hepatitis to be dispensed with medicines for 1 month during the period of restriction.

➤ A list of patients undergoing treatment for Hepatitis C to be submitted to the district administration so that patients/attendants can collect the medicines during the time restrictions are in place or for the duration of the outbreak. Alternatively medicines to be made available to the patients, through ASHAs, Field staff, volunteers

5. HIV

➤ ART centres are to be provided with sanitizers, masks and other protection equipment for PLHIV and healthcare staff.

➤ Uninterrupted supply of Anti-retroviral drugs to PLHIV, through decentralized drug dispensation, online counselling, telemedicine guidance, information, education, and communication (IEC) material through social media apps, etc.

➤ One month dispensation of ART could be provided through Anti-retroviral treatment (ART) centre, Link ART centre or facility-integrated ART centre.

➤ Enable peer educators (PEs) and out-reach workers (ORWs) under NACP to provide multi-week (2-3 week) dispensation of commodities such as condom, needle and syringe, etc. to High Risk Groups during the period of lockdown/restrictions.

➤ Community dispensation of commodities (through Care and Support Centres, home delivery through out-reach workers, volunteers, PLHIV networks) and family dispensation, could also be allowed.

➤ In case of all PLHIV coming to ART centres, triage of symptomatic PLHIV (with fever/cough/shortness of breath/other

respiratory symptoms) should be prioritized while maintaining appropriate physical distancing and other protective measures.

III. Non-Communicable Diseases

➤ Hypertension, Diabetes and other NCDs like COPDs- All known/ diagnosed patients of Hypertension, Diabetes, COPD and mental health to receive regular supply of medicines for up to one month through ASHAs or RRT's on prescription.

➤ Dialysis and Cancer Treatment services – To ensure uninterrupted availability of dialysis and cancer treatment services. Allow easy movement of these patients to access care. In case of patients, who cannot afford private vehicles, RBSK vehicles can be used for facilitating transport of patients. This can be coordinated by the PHC team, who can prepare list of such patients and work with District hospitals to organize appointments via telephone during period of lockdown.

➤ Care for elderly/ disabled and palliative care patients – List of patients/ individuals who need extended support to be maintained at the PHC/CHC level for regular follow up. RRT teams /ASHAs to maintain telephonic contact with these patients and their families. Screening for new onset fever/cough/breathlessness and risk communication on COVID-19 in this sub group should be undertaken.

➤ Blood disorders

a. Services for patients with blood disorders- thalassemia, sickle cell diseases, and haemophilia need to be ensured.

b. Blood transfusion needs to take place at regular intervals and iron chelation should be continued, with ferritin level and CBC checked. The requisite units required for transfusion must be communicated to the blood bank in advance (preferably three days), and availability of blood verified.

c. Requests for scheduled patient transfusions should be sent early, to avoid long waiting periods. Thalassemia and sickle cell disease

patients could enter their requirement of blood in e-raktkosh, specifying a blood unit and particular hospital blood bank.

e. Patients requiring blood transfusion or (Anti haemophilic factor) infusion should be advised to also carry their identity cards, hospital approval, and outpatient cards to facilitate easy movement. Hospitals can issue passes for these patients.

ANNEXURE 5

MATERIAL AND SUPPLIES

Stock position of Personal Protective Gears in the Critical Coastal Zone

| SL NO | INSTITUTION NAME | PPE KIT | N95 MAS | 3L MASK | FACE SHIELD | HAND SANITIZER |
|--------------|------------------------------|-------------------|-------------------|-------------------|--------------------|-----------------------|
| | | ISSUED QTY | ISSUED QTY | ISSUED QTY | ISSUED QTY | ISSUED QTY |
| 1 | CSH VALIYATHURA | 26 | 315 | 535 | 15 | 45 |
| 2 | CHC ANCHUTHENGU | 180 | 550 | 1250 | 60 | 80 |
| 3 | CHC POONTHURA | 560 | 550 | 3342 | 195 | 169 |
| 4 | CHC POOVAR | 145 | 200 | 4650 | 65 | 742 |
| 5 | CHC PULLUVILA | 87 | 425 | 2250 | 60 | 180 |
| 6 | CHC VIZHINJAM | 71 | 197 | 2512 | 100 | 162 |
| 7 | PHC POZHIYOOR | 43 | 190 | 950 | 12 | 120 |
| 8 | PHC KOTTUKAL | 7 | 25 | 250 | 10 | 20 |
| 9 | PHC MUKKOLA VIZHINJAM | 10 | 160 | 700 | 30 | 110 |
| 10 | PHC PERUMATHURA | 85 | 220 | 1000 | 25 | 80 |
| 11 | PHC PUTHUKURICHY | 100 | 210 | 500 | 14 | 60 |
| 12 | PHC VELI | 15 | 115 | 750 | 50 | 50 |

District Stock position of the Critical commodities

| Sl. No | District | Institution | PPE KIT | N95 | Triple layer | Hand Rub solutions | Gloves Sterile 7" |
|--------------|------------|-------------|---------------|---------------|---------------|--------------------|-------------------|
| 1 | Trivandrum | WH | 7,609 | 12,664 | 29,200 | 16,262 | 3,32,450 |
| | | DHS | 11,620 | 5,998 | 16,380 | 9,881 | 1,79,242 |
| | | DME | 8,831 | 6,694 | 26,665 | 4,338 | 90,949 |
| | | OTHERS | 1,600 | 3,950 | 4,800 | 906 | 6,000 |
| TOTAL | | | 29,660 | 29,306 | 77,045 | 31,387 | 6,08,641 |

The mode of operation adopted by the KMSCL in the logistics & supply chain management for Personal Protective gears shall be through Hub & Spoke model.

The point of contact will be the District Drug warehouse Manager, Tvm: Sri Manoj Kumar R. (04712470222/09496003900)

STOCK DETAILS OF ITEMS AVAILABLE WITH COASTAL CRITICAL ZONE HOSPITALS

| Sl.No | Institution Name | Indent Value | Issue Value | Current Stock Value |
|-------|--------------------------|--------------|-------------|---------------------|
| 1 | 24X7 PHC, Pozhiyoor(TSP) | 42,69,692 | 8,19,293 | 15,91,975 |
| 2 | CHC, Anjuthengu | 21,07,188 | 4,40,155 | 11,27,451 |
| 3 | CHC, Poonthura | 41,82,103 | 18,45,455 | 25,88,094 |
| 4 | CHC, Poovar | 30,74,842 | 8,48,676 | 16,46,595 |
| 5 | CHC, Pulluvila | 51,36,424 | 7,66,056 | 21,47,412 |
| 6 | CHC, Vizhinjam | 53,29,765 | 17,09,008 | 27,21,090 |
| 7 | CSH, Valiathura | 34,75,064 | 14,13,904 | 19,21,422 |

| | | | | |
|----|----------------------|-----------|----------|----------|
| 8 | PHC, Kottukal | 10,00,114 | 1,65,580 | 4,23,330 |
| 9 | PHC, Mukkola | 10,42,820 | 3,39,276 | 4,56,316 |
| 10 | PHC, Perumathura | 6,40,979 | 1,17,573 | 3,00,336 |
| 11 | PHC, Puthukurichy | 10,40,530 | 2,45,866 | 1,73,478 |
| 12 | PHC, Veli | 8,30,335 | 1,71,941 | 2,65,243 |

Additional Drug to be purchased:

- *Injection Tocilizumab*
- *Dosage 8mg/Kg single dose of 400 mg per patient)*
- *Projected requirement for 800 patients(assumption: -1% of the Elderly patients may be critically ill)*
- *Unit cost: 6291.60/- for 80 mg Vial*
- *Expenditure 2.51 Crore*

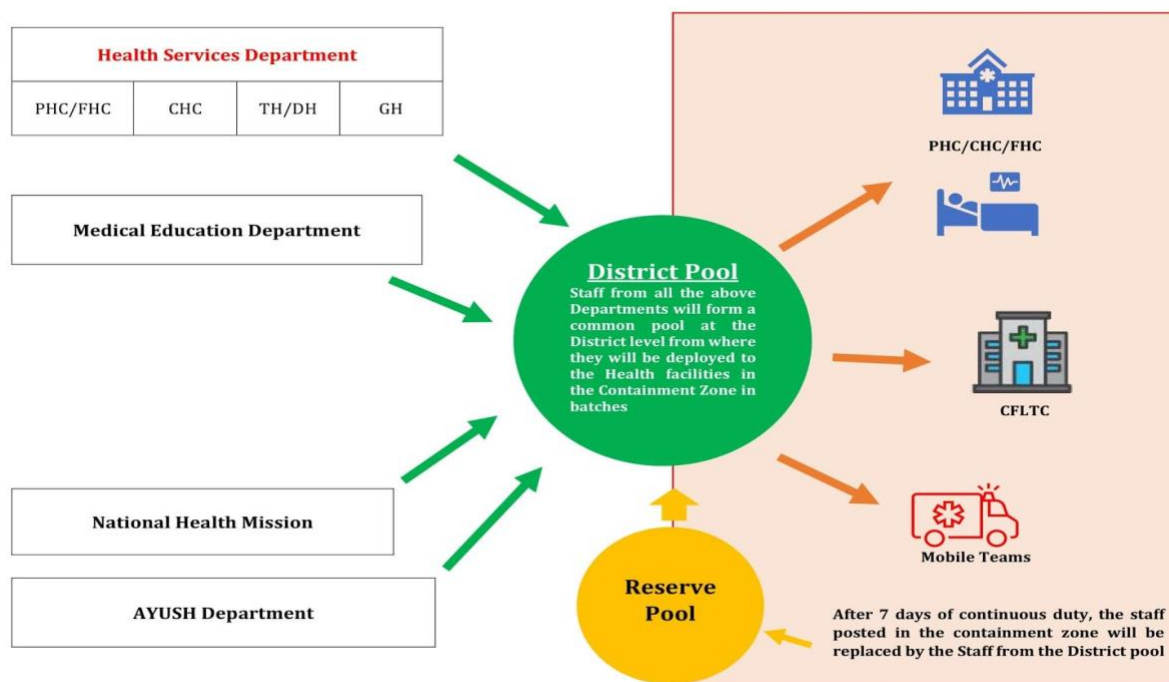
Mobile Medical Units (MMU):

- *In all the three critical costal zones three(03) Mobile Medical Units cum pharmacy has to be set up through NHM*
- *The Mobile Medical Units cum pharmacy shall be stationed at CHC Pulluvila ,CHC Anchuthengu& CHC Poovar as base location .*
- *Each MMU shall have one Doctor ,Staff Nurse & Supportive staff .*
- *Each MMU shall do the home based medical care to all households in the critical containment Zone by doing the assessment of biophysical parameters including pulse oximetry.*
- *The MMU shall also function as the mobile pharmacy & provide Drugs also to the needed.*
- *KMSCL shall replenish the drugs in the MMU through reverse milking strategy*
- *The MMU shall offer the referral services too if needed*
- *Contact Person: Sri Manoj Kumar R(District Drug warehouse Manager)-04712470222/09496003900.*

ANNEXURE 6

HRMANAGEMENT

HUMAN RESOURCE MANAGEMENT IN CONTAINMENT ZONES



17 Institutions have been identified in the coastal belt in Thiruvananthapuram. The current staff strength of Doctors, Staff Nurse, Lab Technician and Pharmacist available in these institutions has been documented in a tabular form.

| Institutions | Staff | Details |
|----------------|-------------|-----------------|
| 1.FHC Kottukal | Doctors | Drs 2 PSC+1LSGD |
| | Staff Nurse | 2 PSC+2 LSGD |

| | | |
|--------------------|----------------|---|
| | Pharmacist | 2 |
| | Lab technician | 1PSC+1 NHM |
| 2.PHC Mukkola | Doctors | 2 PSC+3 NHM |
| | Staff Nurse | 2 |
| | Pharmacist | 1 |
| | Lab technician | 1 |
| 3. PHC Veli | Doctors | PSC-2, RP-3 |
| | Staff Nurse | PSC-1,NHM-1 |
| | Pharmacist | 1 |
| | Lab technician | 1 |
| 4. PHC Perumathura | Doctors | 2 PSC+ 2 RP |
| | Staff nurse | PSC-1+ 1 NHM |
| | Pharmacist | 1 |
| | Lab technician | 1 |
| 5. PHC Vettoor | Doctors | 2 PSC,1 Intern Dr Shahim- 9539119453 Dr Shajahan Rabu Mol |
| | Staff nurse | 2 |
| | Lab technician | HMC-1 |
| | Pharmacist | 1 |
| 6. PHC Edava | Doctors | 3 PSC+1 RP |
| | Staff Nurse | 2 |
| | Lab technician | 1HMC |
| | Pharmacist | 1PSC |
| 7. PHC Pozhiyoor | Doctors | PSC-3, 2 NHM Charge MO- Dr Sabu : 8547233361 |
| | Staff Nurse | PSC-3, NHM-1, HMC-1 |
| | Lab technician | HMC-1 |
| | Pharmacist | 2: 1 PSC, 1 HMC |
| | Doctors | 4PSC+2 NHM |

| | | |
|-------------------------|----------------|---|
| 8. CHC Puthenthopu | Staff Nurse | 5 |
| | Pharmacist | 1-PSC, 2 NHM |
| | Lab technician | 1PSC+1 NHM |
| 9. CHC Anchuthengu | Doctors | PSC-4, NHM-1, Rur P-2 |
| | Staff Nurse | PSC-1, Others-2 |
| | Lab technician | 1 |
| | Pharmacist | |
| 10. CHC Poovar | Doctors | 4-PSC, NHM-2, COVID-1, Post Interns- 2 |
| | Staff Nurse | PSC1, NHM-4, COVID-1 |
| | Lab technician | 2 PSC, 2 HMC |
| | Pharmacist | 1 PSC, 1 HMC, 2 LSGD |
| 11. FHC Poonthura | Doctors | 4 PSC+ 13 Others |
| | Staff Nurse | 1 PSC+4+2 |
| | Pharmacist | PSC-1, Others -2 |
| | Lab technician | PSC1+1 |
| 12.CHC Pulluvila | Staff | Details |
| | Doctors | PSC-3, NHM-3, RP- 1, |
| | Staff Nurse | PSC- 1, SN -4 |
| | Lab technician | 1 PSC, 1 NHM |
| | Pharmacist | 1 PSC, 1 NHM |
| 13.CHC Vizhinzhamb | Doctors | PSC-5, NHM-3, Dent Surg-1 |
| | Staff Nurse | 7 |
| | Lab technician | PSC-2, NHM-1,Others 3 |
| | Pharmacist | 1 PSC, 1NHM,1 HMC |
| 14 PHC PuthuKurissey | Doctors | 2 |
| | Staff Nurse | 2 |
| | Pharmacist | 1 |
| | Lab technician | 1 |

| | | |
|-------------------------------|----------------|--|
| 15. Valliyathura Spl Hospital | Doctors | 4 Asst Surg+2 Pead+ 2 Gynaec+1 Dent Surg+ 1 Anaesthetist+2 NHM+ RP-4 |
| | Staff Nurse | 7 PSC+ 3 |
| | Lab technician | 2 |
| | Pharmacist | 1 PSC+1 NHM |
| 16. TH Varkala | Doctors | 18 PSC+2 NHM |
| | Staff Nurse | 18 SN |
| | Lab technician | 2 PSC+4 HMC |
| | Pharmacist | 2 PSC+4 others |
| 17. TH Chirayinkeezhu | Doctors | 26 PSC+ 4 Others |
| | Staff Nurse | 10 Head Nurse+ 30 SN+ 1 Spl Rec+ 10NHM+7 Others |
| | Pharmacist | 6 PSC |
| | Lab technician | 5PSC+10 NHM+1 HMC |

| HR Availability - Thiruvananthapuram | | | | | |
|---|----------------|---------|-------------------|--------|-------|
| Category | Health Service | NHM PIP | NHM Additional HR | Others | Total |
| Civil Surgeons & Assistant Surgeons | 295 | 99 | 138 | 13 | 545 |
| CMOs | 50 | | | | 50 |
| Speciality Doctors | 285 | 9 | | | 294 |
| Dental Civil/Asst Surgeons | 13 | 6 | | | 19 |
| Rural Posting Doctors | 128 | | | | 128 |
| Head Nurse | 196 | | | | 196 |
| Staff Nurse | 829 | 207 | 310 | 75 | 1421 |
| Pharmacist | 187 | 8 | 40 | 71 | 306 |
| Lab Technician | 175 | 40 | 71 | 90 | 376 |
| Nursing Assistant | 650 | | | 9 | 659 |
| Hospital Attendant Gr1 &2/ Cleaning Staff | 691 | | 282 | | 973 |

Rotation plan for Coastal Belt Institutions

The rotation plan for Doctors has been worked out by pooling of Human Resources from the Community Health Centers, Family Health Centers and Primary Health Centers. 128 Doctors has been issued rural posting orders. As apart of their rural Service they may be posted on a rotation basis to coastal areas.

The staff nurses posted through LSGD may support the respective institutions and staff nurses posted through PSC and NHM in FHCs/PHCs/CHCs may be posted in a rotation basis in coastal areas

As the posts of Pharmacists and Lab technicians are difficult to be spared from PHC/CHC/FHC level, 4 pharmacists for shifts B and C may be taken from major institutions, the rest may be met through NHM.

| Rotation Plan for Coastal belt institutions | | | |
|---|-----|---------------|---------------|
| | A | B | C |
| Doctors: 600 Drs* (500 Asst Surg+ 100 Rural Posting Doctors) | 110 | 110 | 110 |
| Staff Nurses** | 63 | 63 | 63 |
| Pharmacist | 28 | 24 (Required) | 24 (Required) |
| Lab Technician | 28 | 28 | 28 (Required) |

CREATE MAKE SHIFT HOSPITAL AT PULLUVILA AND STRENGTHENING SPECIALITY HOSPITAL VALIYATHURA

COVID 19 outbreak is progressing to community transmission along the southern coastline of the State. The coastal belt of Trivandrum District is identified as critical containment zone and triple lockdown is imposed in these areas after dividing it into three geographical zones. The general population in these areas are expected to remain within their residences and are strictly prohibited from leaving their concerned zones. In light of the above mentioned situation, the basic amenities for this population will have to be provided at their doorstep. One among these amenities is the Healthcare services which could be looked after only through our

department. Though COVID response activities are given the prime importance, non-COVID essential medical, surgical and obstetric services cannot be denied. Thus, adequate facilities should be arranged in such centres in each zone, which are easily accessible to the respective populace.

Present Situation

At present we have a community health centre at Pulluvila and a coastal specialty hospital at Valiyathura which are at appropriate centres. The CHC Pulluvila is having skeletal staff providing primary healthcare services. No specialty services are available in this zone at present. The CSH Valiyathura is a specialty hospital where, apart from Primary Healthcare, specialty services like obstetric and paediatric services are delivered.

Objective of the Proposal

- *Provide essential healthcare services to the population in the containment zones in the coastal region of Trivandrum District, under triple lockdown*
- *Provision of essential Medical, Obstetric and Paediatric services to the abovesaid population*
- *Provision for appropriate and timely referral of complicated cases.*

Facility requirements

Two specialty healthcare facilities are proposed one in Pulluvila and the other in Valiyathura. Each such centre should have facilities for providing basic specialty services. Separate OP rooms shall be arranged for each of the 3 above mentioned specialties and one OP room for General OP. Examination room, Procedure room, Pharmacy, treatment room, wash room and store room shall be arranged. An Observation room and male and female wards may preferably be arranged. A labour room shall be setup. Basic facilities like uninterrupted water supply, electricity and drainage should be ensured. The facility should be easily accessible by ambulance. Residential facilities should also be provided to the staff deployed to

these facilities. The LSGI shall be given the responsibility for identifying the facility and providing all the basic amenities in consensus with the charge medical officer of the existing healthcare facility (CHC Pulluvila or CSH Valiyathura)

Administration

The charge medical officer of the existing healthcare facility (CHC Pulluvila or CSH Valiyathura) shall be responsible for the overall administration of the facility.

Services provided

Two specialists from each specialty, one Anaesthetist and four general cadre doctor may be posted in each such centre for a period of 10 days. Complicated cases may be referred to higher centres outside the containment zones only after attended by the concerned specialist.

Human Resources

Specialists from existing healthcare institutions in the district need to be deployed to these facilities for a period of 10 days per turn. Doctors from the private sector, residents from medical colleges and specialists from ESI department also may be utilised. Four nurses, two pharmacist, two lab technicians, three cleaning staff may be posted. All staff should strictly practise all infection control practices. The deployed staff will have to stay in the residential facility provided in the vicinity of the facility. After a duty period of 10 days, one week duty off may be provided to the team and a new team shall be posted.

| HR Requirement - Speciality Facilities | | | |
|---|---|--|------------------------------|
| Category | Description | HR for 1 month for 1 institution | HR needed for 2 institutions |
| Physician | 1 Asst Professor from MCH 1 Physician from Health Services | 6 (3 from MCH and 3 from Health Service) | 12 |
| Peadeatrician | 1 Asst Professor from MCH | 6 (3 from MCH and 3 from Health Service) | 12 |

| | | | |
|---------------------------|---|--|----|
| | 1 Physician from Health Services | | |
| Gynaecologist | 1 Asst Professor from MCH 1 Physician from Health Services | 6 (3 from MCH and 3 from Health Service) | 12 |
| Anaesthetist | 1 Asst Professor from MCH | 3 | 6 |
| Medical Officer/Residents | 2 from MCH and 2 from Health Services | 12 | 24 |
| Staff Nurses | 2 from MCH and 2 from Health Services | 12 | 24 |
| Pharmacist | 2 | 6 | 12 |
| Lab Technician | 2 | 6 | 12 |
| Cleaning staff | 3 | 9 | 18 |

ANNEXURE 7

EXPERT HEALTH TEAM VISIT

- The Critical containment Zone shall have expert team visit by the experts from Medical College & General Hospital, Trivandrum on alternate days to ensure the comprehensive care for the Non COVID health issues & to give supportive supervisory suggestions to the MMU team
- The expert team will have Physician, Surgeon, Gynecologist
- There should be psychiatric review fortnightly

Schedule of visit

1st& 3rdMonday :- Gynecologist from Medical College

1st& 3rdWednesday :- General Medicine expert from Medical College

1st& 3rdFriday:- Surgery expert from Medical College

2nd& 4thMonday :- Gynecologist from W& C Thykkadu

2nd& 4th Wednesday :- General Medicine expert from GH TVM

2nd& 4th Friday:-Surgery expert from GH Tvm

ANNEXURE 8

HEALTH DIRECTORY

| Health Directory | | | |
|-------------------------|--|-------------------------------|------------|
| Sl. No | Designation | Name | Phone No |
| 1 | Honorable Minister for Health and Social Justice | Smt K KShylaja Teacher | 9447694326 |
| 2 | Principal Secretary Health | Dr Rajan Khobragade IAS | 9072628100 |
| 3 | SMD NHM | Dr RathanKelkar IAS | 9483899911 |
| 4 | Joint Secretary Health | Dr Sriram Venkitaraman IAS | 9048027777 |
| 5 | Director of Health Services | Dr Sarita RL | 9447139266 |

| | | | |
|----|---|----------------------------|------------|
| 6 | Project Director KSACS | Dr Ramesh R | 9446332633 |
| 7 | Additional Director Administration and Training | Dr Sameera A | 9447525157 |
| 8 | Additional Director TB | Dr Parvathy A P | 9447424678 |
| 9 | Additional Director Planning | Dr V R Raju | 9400355719 |
| 10 | Additional Director Medical | Dr Bindhu Mohan | 9447343238 |
| 11 | Additional Director Public Health | Dr V Meenakshi | 9946102860 |
| 12 | Additional Director Vigillance | Dr Muraleedharan Pillai | 9447136608 |
| 13 | Additional Director FW I/c and State Program Manager | Dr V R Raju | 9400355719 |
| 14 | Director PH Lab | Dr Sunija | 9995429758 |
| 15 | Principal SIH&FW and Executive Director SHSRC | Dr Shinu K S | 9447069900 |
| 16 | Deputy Director FW | Dr Sandeep K | 9946105461 |
| 17 | Deputy Director Planning | Dr Jagadeesan C K | 9447124413 |
| 18 | Deputy Director Ophthalmology I/C | Dr Jagadeesan C K | 9447124413 |
| 19 | Deputy Director Medical | Dr Santha K K | 9446221118 |
| 20 | Deputy Director NVBDCP | Dr Sindhu M D | 9447161523 |
| 21 | State Leprosy Officer/DD PH | Dr Vidya KR | 9446764488 |
| 22 | Deputy Director- Clinical Establishment | Dr Sanil Kumar | 9447701262 |

| | | | |
|--------------------------------|--|---------------------------|------------|
| 23 | Deputy Director Dental | Dr Simon Morison | 9995919664 |
| 24 | Asst Director- State NCD Nodal Officer | Dr Bipin K Gopal | 9447001934 |
| 25 | Asst Director ORT | Dr Manjula Bhai N S | 9447494937 |
| 26 | Asst Director PH | Dr Sheela S | 6282123803 |
| 27 | Asst Director Planning | Dr H Veena Saroji | 9447819437 |
| 28 | JAMO FW | Dr Anoj S | 9447335860 |
| 29 | JAMO A& T | Dr Suja S R | 9495903797 |
| 30 | JAMO PH | Dr Sindhu Sreedhar | 9747853036 |
| 31 | JAMO Planning | Dr Ajan M J | 9496337143 |
| 32 | Medical Officer T B | Dr DeepuSurendran | 9995452827 |
| National Health Mission | | | |
| 33 | State Mission Director | Dr.Rathan Kelkar I A S | 9483899911 |
| 34 | State Programme Manager & Appellate Authority (RTI), NHM | Dr. V.R. Raju | 9400355719 |
| 35 | Director Finance | Smt. M Geethamony Amma | 9072681600 |
| 36 | State HR & Administration Manager | Sri. Suresh K | 9946292222 |
| 37 | Chief Engineer | Smt. Anila C J | 7592002255 |

| | | | |
|----------------------------|--|----------------------|------------|
| 38 | Senior Administrative Assistant/Public Information Officer | Smt. Vinodini N | 9495637547 |
| 39 | Internal Audit Officer | Sri. M. Ajithkumar | 8921424362 |
| 40 | State Nodal Officer NCD | Dr. Bipin K Gopal | 9946105969 |
| 41 | State Nodal Officer {Adoloscent Health} | Dr. Amar Fettle | 9946123995 |
| 42 | State Quality Assurance Officer | Dr.Amjith E Kutty | 7593864205 |
| 43 | State Nodal Officer (Training) | Dr.Divya.V.S | 9446588176 |
| 44 | State Nodal Officer (Child Health) | Dr.Sreehari M | 9539191910 |
| 45 | State Urban Health Manager | Dr.Athira Krishnan | 9946100511 |
| 46 | State Data Officer | Sri. Preeth V S | 9447859326 |
| 47 | Head (Social Development) | Dr.Mathews M Numpeli | 9946777951 |
| 48 | State Epidemiologist | Dr Aarathee | 9947801678 |
| KMSCL | | | |
| 49 | MD KMSCL | Mr Ajaya Kumar IAS | 9447389890 |
| 50 | GM KMSCL | Dr Dileep Kumar S R | 9496550269 |
| State Health Agency | | | |

| | | | |
|--------------------------------------|---|---------------------------|------------|
| 51 | Executive Director | Dr.Rathan Kelkar IAS | 9483899911 |
| 52 | Joint Director (Finance) | Smt. M Geethamony Amma | 9072681600 |
| 53 | Joint Director (Operations) | Dr.E.Bijoy | 974455010 |
| 54 | Manager (Grievance Redressal and M&E) | Shri.Anikrishna | 9037268683 |
| 55 | Manager (Hospital Network & Quality Assurance) | Dr.Vimal | 996121044 |
| DMO Health Thiruvananthapuram | | | |
| 56 | District Medical Officer | Dr P PPreetha | 9946105472 |
| 57 | District Program Manager | Dr Arun | 9946105471 |
| 58 | Additional DMO/ DSO | Dr Jose D'Cruz | 9447010933 |
| 59 | Additional DMO | Dr Neena Rani | 9446121586 |
| 60 | Deputy DMO | Dr Sukesh Raj | 7907876684 |
| 61 | RCH Officer | Dr DivyaSadasivan | 7356446014 |
| 62 | District T B Officer | Dr Dev Kiran | 8547597455 |
| 63 | Asst Nodal Officer Aardram | Dr Ajeesh | 9048466891 |

| Institutional officers - Thiruvananthapuram | | | | |
|--|-----------------|------|------------|------------|
| Name of the Institution | Phone Number | NAME | Desigation | Mobilie No |

| | | | | |
|-----------------------|--------------|----------------------|----------------------|------------|
| GH Thiruvananthapuram | 0471-2307874 | Dr.Padmalaatha | Superintendent | 9447753851 |
| GH Neyyattinkara | 0471-2221935 | Dr.S. Valsala | Superintendent | 9020305570 |
| DMH Peroorkada | 0471-2432071 | Dr.Bindhu.B.K (Supt) | Superintendent | 9400082060 |
| DH Nedumangad | 0472-2802262 | Dr.Silpa Babu Thomas | Superintendent | 8281094329 |
| THQH Chirayinkeezhu | 0470-2646565 | Dr.Shabnam | Superintendent | 9446309282 |
| THQH Parassala | 0471-2202266 | Dr.Unnikrishnan | Superintendent | 9447101937 |
| THQH Malayinkeezhu | 0471-2282490 | Dr.Gayathri.L.K | Superintendent | 9074115209 |
| TH Fort | 0471-2471766 | Dr Stanley S | Superintendent | 9048948150 |
| TH Varkala | 0470-2602549 | Dr.Biju | Superintendent | 8547961765 |
| TH Nemom | 0471-2390276 | Dr Prem Kumar | Superintendent | 9447211605 |
| TH Attingal | 0470-2622447 | Dr.JustinJose.S.J | Superintendent | 9446466368 |
| TH Vithura | 0472-2856252 | Dr. Sasi.M.D | Superintendent | 9447052886 |
| CHC Iranimuttom | 0471-2455620 | Dr.Jalajakumari | Medical Officer | 9496249191 |
| CHC Palode | 0472-2840561 | Dr.Sreejith | Medical Officer(I/C) | 8547723496 |

| | | | | |
|--------------------|--------------|-----------------------|-----------------|-------------|
| CHC Kallara SCP | 0472-2860857 | Dr.PadmaKesari | Medical Officer | 9446456296 |
| RHTC Vakkom | 0470-2653862 | Dr. Siju | Medical Officer | 9495297170 |
| CHC Poovar | 0471-2210017 | Dr.Jawahar.I.S | Medical Officer | 9961492770 |
| CHC Manamboor | 0470-2688354 | Dr.Anilkumar.P | Medical Officer | 9447092205 |
| CHC Perumkadavila | 0471-2276169 | Dr. Sunimol | Medical Officer | 9895025988 |
| CHC Vellanadu | 0472-2882199 | Dr . Jayakumar | Medical Officer | 7012772876 |
| CHC Vizhinjam | 0471-2480400 | VASHIDA GUNASELVI | Medical Officer | 9447470730 |
| CHC Vellarada | 0471-2242075 | Dr.Sunil | Medical Officer | 9961367267 |
| CHC Puthenthopu | 0471-2750023 | Dr. Achamma | Medical Officer | 9847512417 |
| CHC Kanyakulangara | 0472-2832209 | Dr.PreethaSoman. S | Medical Officer | 9447387250 |
| CHC Pulluvilla | 0471-2260348 | Dr Mangala S | Medical Officer | 9526012515 |
| CHC Kesavapuram | 0470-2672157 | Dr.Shaji.K.V | Medical Officer | 94970099992 |
| CHC Pallickal | 0470-2681200 | Dr.Jayaram | Medical Officer | 9447165728 |
| CHC Vilappil | 0471-2289185 | Dr.Elizabath | Medical Officer | 9446467090 |
| CHC Aryanad | 0472-2853833 | RADHIKA. C | Medical Officer | 9446981438 |

| | | | | |
|----------------------------|--------------|-----------------------------|-----------------|------------|
| CHCA Anchuthengu | 0470-2656870 | Dr. Shyamjivoise | Medical Officer | 9633819795 |
| CHC Venpakal | 0471-2223594 | Dr. Y.A AJITH | Medical Officer | 9447208039 |
| CHC Andoorkonam | 0471-2751397 | Dr. Rema.L | Medical Officer | 8907499103 |
| Palace Dispensary, Kowdiar | 0471-2433758 | Dr. Sumi | Medical Officer | 9496536374 |
| PHC Karamana | 0471-2344935 | REJITHA D.R | Medical Officer | 8086218468 |
| PHC Ulloor | Nil | Dr. Sangeeth Shah S | Medical Officer | 9497592523 |
| PHC Bharathannur | 0472-2868629 | Dr. Rajeev | Medical Officer | 9745744418 |
| PHC Kizhuvilam | 0470-2794688 | Dr. Deepa | Medical Officer | 9495963699 |
| PHC Perumpazhuthoor | 0471-2222183 | Dr. LINI.MS | Medical Officer | 9447801700 |
| PHC Kanjiramkulam | 0471-2263505 | Dr. Asha Rajan | Medical Officer | 8848499229 |
| PHC Navaikulam | 0470-2694300 | Dr. Shaninbava | Medical Officer | 9447801169 |
| PHC Kalliyoor | 0471-2405401 | MEDICAL OFFICER | Medical Officer | 9496969239 |
| PHC Vellayani | 0471-2382209 | Dr. Ajesh | Medical Officer | 9446483606 |
| PHC Azhoor | 0470-2144366 | Dr. PADMAPRASAD | Medical Officer | 8547189859 |
| PHC Parasuvaikkal | 0471-2200071 | DR. LIJIMOL B | Medical Officer | 9539759498 |

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| PHC Nagaroor | 0470-2678656 | DR.NISHA JAYACHANDRAN | Medical Officer | 9946998801 |
| PHC Malayadi | 0472-2891800 | Dr. Kannan T | Medical Officer | 9447244208 |
| FHC Poonthura | 0471-2380427 | Dr.Beena .S.Thamp i | Medical Officer | 9947715197 |
| FHC Kattakada | 0471-2293828 | Dr.Nelson | Medical Officer | 9447413309 |
| FHC Pozhiyoor | 0471-2213345 | Dr.Sabu.V,S | Medical Officer | 8547233361 |
| FHC Thiruvallom | 0471-2485788 | MINU JACOB | Medical Officer | 9446255011 |
| FHC Kunnathukal | 0471-2250077 | Dr.Vijayadas.R | Medical Officer | 9048100456 |
| FHC Tholikkodu | 0472-2878580 | Dr. LEKHA THOBIAS | Medical Officer | 8139888265 |
| FHC Edava | 0470-2661040 | Dr. Raju G | Medical Officer | 8921748816 |
| FHC Vettur | 0470-2612651 | Dr SHAHIM M | Medical Officer | 9539119453 |
| FHC Thonippara | 0470-2667177 | Dr.JohnyPererah | Medical Officer | 9446701875 |
| FHC Madavoor | 0470-2681532 | Dr.Stency Sebastian | Medical Officer | 9496748480 |
| FHC Pangappara | 0471-2418038 | Dr.AjithChakravart hi | Medical Officer | 9809998919 |
| FHC Chettivilakam | 0471-2730404 | Dr.John Simon | Medical Officer | 9946014833 |
| FHC Chenkal | 0471-2236622 | Dr.Lija | Medical Officer | 9961367218 |

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| FHC Kulathoor | 0471-2209551 | Dr.SOWMYA | Medical Officer | 8921167053 |
| FHC Karode | 0471-2218561 | Dr.Sonykrishna.S.A | Medical Officer | 8921641003 |
| FHC Chembooru | 0471-2257755 | DR.MANJUMOHANA DAS | Medical Officer | 9497688590 |
| FHC Kollayil | 0471-2234355 | Dr.Anuradha | Medical Officer | 9895352497 |
| FHC Amboori | 0471-2246193 | DR.VINCY | Medical Officer | 9447732827 |
| FHC Kallikadu (new) | 0471-2273715 | DR. AJOSH THAMBI.T.S. | Medical Officer | 9400680328 |
| FHC Uzhamalakkal | 0472-2899677 | Dr.Ramesh Krishnan | Medical Officer | 9746291336 |
| FHC Kuttichal | 0472-2854871 | Dr.Joy John | Medical Officer | 9447140405 |
| FHC Kallikadu (old) | 0471-2273739 | Dr.SHEEBA S.L | Medical Officer | 7907641361 |
| FHC Mukkola (Vizhinjam New) | 0471-2484603 | DR.MALINI.MOHAN | Medical Officer | 8848871605 |
| FHC Veli | 0471-2704618 | Dr.BINDHU T | Medical Officer | 9495719321 |
| FHC Mudakkal | 0470-2637475 | Dr Saritha S | Medical Officer | 9895288235 |
| FHC Perumathura | 0471-2426533 | ARNOLD DEEPAK | Medical Officer | 9947792299 |
| FHC Puthukurichi | 0471-2426562 | DR GODFREY LOPEZ.T | Medical Officer | 9946906513 |
| FHC Mangalapuram | 0471-2424100 | Dr MINI P MANI | Medical Officer | 9495828897 |

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| FHC Peringammala | 0472-2846310 | Dr. VIVEK | Medical Officer | 9497471179 |
| FHC Anakudi | 0472-2837790 | DR.ANOOP | Medical Officer | 8281079159 |
| FHC Pullampara | 0472-2828047 | Dr.NIJU.M.L | Medical Officer | 9447282772 |
| FHC Panavoor | 0472-2865449 | Dr.PREETHA S R | Medical Officer | 9447127555 |
| FHC Anad | 0472-2802375 | Dr.P.r.Manoj Kumar | Medical Officer | 9447128584 |
| FHC Adayamon | 0470-2649202 | DR.SHEEJA .M P | Medical Officer | 8547495706 |
| FHC Karavaram | 0470-2691700 | Dr.Fazeela.A | Medical Officer | 9747255556 |
| FHC Pulimath | 0472-2861070 | Dr Jayasurya J u | Medical Officer | 9745777254 |
| FHC Cheruniyur | 0470-2612678 | Dr Renjini R J | Medical Officer | 9946353067 |
| FHC Vilavoorkkal | 0471-2284080 | DR.MALINI | Medical Officer | 9447246457 |
| FHC Maranalloor | 0471-2298524 | Dr.Rajesh | Medical Officer | 9496102494 |
| FHC Vembayam | 0472-2834833 | Dr.Avis Philip | Medical Officer | 8281151124 |
| FHC Manikal | 0472-2583433 | Dr.Heera.T.S | Medical Officer | 9446970421 |
| FHC Ottur | 0470-2612842 | DR.SHEEJA.P.K | Medical Officer | 9447024909 |
| FHC Vattiyoorkavu | 0471-2364187 | Dr. Nikhil Rajagopal | Medical Officer | 8281806834 |

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| FHC Vamanapuram | 0472-2835810 | DR.Sajikumar P N | Medical Officer | 9447250469 |
| FHC Kadakampally | 0471-2743392 | Dr ANNIE ALOYSIUS | Medical Officer | 9446161587 |
| FHC Paraniyam | 0471-2263786 | DR: SUBI. V. P | Medical Officer | 9495718681 |
| FHC Chemmaruthy | 0470-2612862 | Dr.Anwar Abbas | Medical Officer | 9447340451 |
| FHC Poozhanad | 0471-2257575 | Dr.Vinoj.k.v | Medical Officer | 9946803005 |
| FHC Katakada (New Amachal) | 0471-2293475 | Dr.Santhakumar | Medical Officer | 9447471357 |
| FHC Thonnakkal | 0471-2709898 | NIMMI K POULOSE | Medical Officer | 9497476417 |
| FHC Aruvikkara | 0472-2886274 | Dr.Anju Miriam john | Medical Officer | 9995289910 |
| FHC Karakulam | 0472-2587700 | Dr. Jamin.S.M | Medical Officer | 9497613130 |
| FHC Kilimanoor | 0470-2651313 | Dr.Sudhir Jacob | Medical Officer | 9497015832 |
| FHC Pallichal | 0471-2400367 | Dr DEEPA M S | Medical Officer | 8129534641 |
| FHC Balaramapuram | 0471-2402209 | Dr BIJU R.M | Medical Officer | 9497638866 |
| FHC Keezhattingal | 0470-2621131 | Dr.Bhagyalekshmi | Medical Officer | 9497768868 |
| FHC Kottukal | 0471-2269070 | Dr Chintha Sukumaran | Medical Officer | 9746671297 |
| FHC Jagathy,Tvm | Nil | Dr.Ambili | Medical Officer | 9995891252 |

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| FHC Thycaud, TVPM | 0471-2323457 | Dr. Dhanya. G Krishnan, | | 9447410511 |
| Nedumangadu, Thiruvananthapuram | 9746314014 (MO) | Dr.Arun | | 9746314014 |
| Rajbhavan dispensary Kowdiar,TVPM | 0471-2728745 | Dr.Pearl | | 9447452738 |
| MLA hostel Health Clinic, TVPM | 0471-2222251 | | | |
| Jail Dispensary Kattakada,TVPM | 0472-2850044 | | | |
| Central Prison,Poojappura,TVPM | 0471-2342139 | | | |
| Secretariat Health Clinic, TVPM | 0471-2518649 | Dr.Athul | | 9947429871 |
| Palayam Police Hospital, TVPM | 0471-2320746 MO No.9497454672 | Dr.Maya | | 9497454672 |
| Police Hospital, Peroorkada, TVPM | 0471-2433949 MO No.9633999921 | | | 9633999921 |
| Mental Health Centre, Peroorkada | 0471-2434762 | Dr.Anil | | 9447101988 |
| CDH Pulayanarkotta | 0471-2442041 | Dr.Vanaja | | 9400152835 |

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| Govt. Ayurvedic Maternity Hospital, Poojappura, TVPM | 0471- 2350938 | CHITHRA REVI | | 854735023 7 |
| Coastal speciality hospital, Valiyathura, TVPM | 0471- 2502480 | Dr.Sonee Thomas | | 984619109 5 |