To,
Divisional Commissioner, MP
District Collector, MP
Dean, Medical Colleges, MP (DCH)
Chief Medical and Health Officer, MP
Civil Surgeon and Hospital Superintendent, MP
Hospital In-Charge/Superintendent COVID facilities, MP

Sub: Regarding Work-up for diagnosis, prognosis / risk stratification, and/or safety of therapeutics suggested for hospitalized patients with confirmed COVID-19 in DCH facilities.

In reference to the above-mentioned subject following guidelines are formulated in addition to the previously released guidelines and are to be followed by the Hospital In-Charge/Dean of the facilities treating confirmed COVID-19 cases.

Administrative Guidelines-

Role and Responsibilities of Dean/Nodal Officer (DCH)

Coordination-

a. The Dean/Nodal Officer shall be responsible to coordinate with the Chief Medical and Health Officer and the Hospital In-Charge of the DCH/CDC of the feeding districts.
b. The Dean/Nodal Officer shall obtain the daily line listing of the critically ill patients identified for referral from the CMHO and DCH/CDC In-Charge along with their vitals and prognostic status, and facilitate their admission process.
c. The Dean/Nodal Officer will be responsible for daily line listing of the critically ill patients in their hospitals and the same shall be communicated to the concerned CMHO for corrective actions.

Mentoring-

a. The Dean/Nodal Officer shall be responsible for the training of the peripheral staff for early recognition of the danger signs.
b. The Dean/Nodal Officer shall ensure the training of EMT for identifying the danger signs and for correct vital monitoring of the patients during the referral.
c. The Dean/Nodal Officer shall list all the critically ill patients and will assist the technical team of the medical college in reviewing their case records and planning of treatment.

Referral Mechanism-

a. The Dean/Nodal Officer shall be responsible for coordinating with Superintendent DCH, CMHO and Hospital In-Charge of DCH/CDC for arranging the transport ambulance with ALS and EMT for referral of the patients from the feeding districts and facilities to the DCH.
b. The Dean/Nodal Officer shall communicate with the driver and the EMT of the ambulance and will regularly guide them in monitoring of the vitals and stabilization of the patient.
c. The Nominated Triage Nodal Officer shall communicate the findings of the referred-in patient to the clinician/physician in the Triage area or the designated ward.
d. In case of the clinical deterioration of the patient, the patient must be referred, adjuring the referral protocols issued by Government of Madhya Pradesh in an Advanced Life Support Ambulance in presence of EMT.

e. Along with the arrangement of transport facility, the nodal officer shall communicate the details of the referred patient to the concerned Nodal Officer of the facility where the patient is referred.

**Hospital Triage Management**

a. The Dean/Nodal Officer shall designate a person in every shift who will be responsible for receiving the patients in the Triage Area.

b. A Registration Counter is to be established in the Triage Area for proper documentation purpose. It must be ensured that the documentation process should not delay the treatment of the patient.

c. The Dean/Nodal Officer shall be responsible for triaging the patients in the triage area and will shift the patients to designated areas in accordance to their COVID Status and Prognosis to COVID Wards, HDU and ICU.

d. The Triage area should be clearly demarcated with appropriate signages for COVID Positive Cases with Mild, Moderate and Severe Illness and Non COVID patients with Mild, Moderate and Severe patients. The Severity status of the patient can be assessed using the table as mentioned below

<table>
<thead>
<tr>
<th>Clinical Criteria</th>
<th>MILD</th>
<th>MODERATE</th>
<th>SEVERE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPO2</td>
<td>&gt; 94 % in Room Air</td>
<td>90 - 94 % in Room Air</td>
<td>&lt; 90 % in Room Air</td>
</tr>
<tr>
<td>RR</td>
<td>&lt; 16 / min</td>
<td>&gt;16/min</td>
<td>&gt; 16/min</td>
</tr>
<tr>
<td></td>
<td>No Pneumonia</td>
<td>Pneumonia +</td>
<td>Pneumonia ++</td>
</tr>
</tbody>
</table>

e. The Officer In charge at the Triage Area shall identify the patients with moderate and mild illness and will ensure the step down to DCHC/CCC after appropriate counselling and arranging the transport.

f. In case of indeterminate COVID status of the patient, the nodal officer shall ensure the adherence of the Clinical Management Protocols as per GOI/ICMR.

g. The Triage team should be trained and guided for transfer of the patient from TRIAGE area to the designated ward/HDU/ICU after stabilization of the vitals and coordinating with the respective Ward In-Charge.

h. The Triage Team shall immediately ensure the consultation with the clinician/physician for initiation of Oxygen therapy and fluid management as per the Clinical Guidance Protocols.

i. The Nodal Officer shall ensure availability of the Diagnostic Tests at the POC as tabulated below under Diagnostic Protocols.

**Diagnostic Protocols**

For ease of comprehension, the lab investigations and investigations for risk stratification has been tabulated as below for ensuring management at admission, daily requisition or repetition at 48-72 hours as indicated:
<table>
<thead>
<tr>
<th>Investigation</th>
<th>Minimum frequency in all patients</th>
<th>Frequency of diagnostic tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBP with ESR</td>
<td>Baseline</td>
<td>Every 48-72 hrs</td>
</tr>
<tr>
<td>Neutrophil:Lymphocyte Ratio</td>
<td>Baseline</td>
<td>Every 48-72 hrs</td>
</tr>
<tr>
<td>CRP (Quantitative)</td>
<td>Baseline</td>
<td>Every 48-72 hrs</td>
</tr>
<tr>
<td>S. Creatinine</td>
<td>Baseline</td>
<td>Every 48-72 hrs</td>
</tr>
<tr>
<td>RBS</td>
<td>Baseline</td>
<td>Daily, Frequently in those with elevated sugars</td>
</tr>
<tr>
<td>ECG</td>
<td>Baseline</td>
<td>Earlier, if indicated</td>
</tr>
<tr>
<td>CXR</td>
<td>Baseline</td>
<td>Every 48 hrs, or earlier if indicated</td>
</tr>
<tr>
<td>RFT</td>
<td>Baseline</td>
<td>Every 48-72 hrs</td>
</tr>
<tr>
<td>LFT</td>
<td>Baseline</td>
<td>Every 48-72 hrs</td>
</tr>
<tr>
<td>Prothrombin Time/ INR</td>
<td>-</td>
<td>Baseline, and as indicated</td>
</tr>
<tr>
<td>APTT</td>
<td>-</td>
<td>Baseline, and as indicated</td>
</tr>
<tr>
<td>D-dimer</td>
<td>-</td>
<td>Baseline</td>
</tr>
<tr>
<td>CT-Scan</td>
<td>Optional, if indicated</td>
<td></td>
</tr>
</tbody>
</table>

ABG is needed in patients on mechanical ventilator and is to be done at least daily.

Any other investigation, as clinically indicated will need to be performed.

a. Dean/Hospital In Charge of the DCH Facility shall ensure the formulation of Duty Roasters of the doctors in the treating Wards/HDU/ICU with team based approach.
b. Dean/Hospital In Charge shall ensure that the Assigned Consultants are taking rounds in the wards twice daily and the Duty Doctor shall take the round in the ward three times a day.
c. Dean/Hospital In Charge with coordination of Nodal Officer shall ensure daily line listing of the critically ill patients and reviewing of the case records by the technical committee of the DCH facility.
d. Dean/Hospital In Charge will coordinate with the District Collector and Divisional Commissioner for ensuring the availability of Convalescent Plasma.
e. Dean/Hospital In Charge shall daily review the patients identified for up referral/down referral and will ensure timely transport of these patients.
f. Dean/Hospital In Charge shall daily review the systemic medical/treatment audit of the deceased patients by the Technical Committee of the facility.
g. **Deans/Hospital In-Charge will Daily Monitor the following-**
   i. Presence of the Doctors/Consultants/Nursing Staff on the duty in accordance to the duty roaster
   ii. It must be ensured that the critically ill patient is managed and treated by the HOD/ Senior Specialist only.
   iii. Taking of the round by the consultants twice daily and the duty doctor thrice a day and they are mentioning the findings of the patients at the time of round and the treatment/management advised.
   iv. Vital Chart Management by the Nursing Staff in accordance to the Clinical Management Protocols at two hourly basis in Ward and one hourly basis in ICU as follows-
      1. Respiratory Rate
      2. Heart Rate/Pulse
      3. BP
4. SpO₂
5. RBS (if diabetic)
6. Temperature
7. Input / Output charting

v. Treatment is provided in accordance to the Technical Treatment Guidelines and the Protocols
vi. The Quality of the food is checked and is timely available
vii. Drinking warm water shall be available to all the patients in the ward/room itself 24*7.

viii. Availability of sponging/bathing of the patients is ensured daily
ix. The Infection Management Protocols in accordance to the CPCB Guidelines and Bio Medical Waste Management Rules 2016 (as amended) are followed in the hospital
x. The bed sheets of the patients are changed daily.
xi. Shall ensure that the patients with NCD/Co Morbid conditions are receiving appropriate treatment.

xii. IEC related to COVID is displayed in the hospital and waiting areas.

xiii. Will convey daily patient status to the family members and if the patient is stable, he/she shall be able to talk to family member daily.

xiv. Even if the condition is critical or deteriorating, the same shall be communicated to the family members as a status update.

h. Deans/Hospital In-Charge will Weekly Monitor Availability and Indenting of Stock of all essential drugs, supplies, and laboratory consumables as mentioned in this document or in standard treatment guidelines.

i. Deans/Hospital In-Charge will Monthly Monitor:
   a. Preventive Equipment Maintenance and Calibration by Bio Medical Engineers
   b. Skill development of Doctors, Nursing Staff and Paramedical Staff for emergency procedures like tracheostomy, intubation, etc.

j. Deans/Hospital In-Charge will Weekly Inspect the following and ensure functionality and adequate supplies in the following areas:
   a. Drug-Store
   b. Wards/ICU/HDU
   c. Waiting Areas
   d. Oxygen System Installation Area
   e. ALS allotted to the hospital
   f. Doctors and Nursing Duty Rooms

k. Deans/Hospital In-Charge will ensure Skill Development of Doctors/Nurses and Paramedic Staff for following Procedures:
   a. Use of Ventilators
   b. Using HFNO
   c. Oxygen Therapy as per Clinical Management Protocols
   d. Central Venous Canula Insertion
   e. Life Saving Procedures like - Tracheostomy, Intubation, CPR, etc.

l. Deans/Hospital In-Charge will ensure Quality Improvement Process:
   a. Quality Work abouts
   b. Conduct Regular Staff Meetings
   c. Disseminate New Scientific Evidence
   d. Weekly Check-up of Housekeeping, Laundry and Kitchen
e. Three Monthly Swab Culture of OT, ICU and Wards
f. Assess the Performance of Patient Management by following Indicators-
   i. Deep Venous Thrombosis Prophylaxis
   ii. Stress Ulcer Prophylaxis
   iii. Ventilator Associated Pneumonia prevention strategy
   iv. Central Venous Catheter Blood Stream Infection Prevention Strategy, etc.
g. Be in continuous discussion and seek technical guidance from COVID-19 : CoE expert of AIIMS Bhopal if needed in any critical/difficult case.

(Dr. Sanjay Goyal)
Commissioner Health
Directorate of Health Services
Madhya Pradesh

S.No./IDSP/2020/ 1376  Date  08/2020

Cc-
1. Additional Chief Secretary, DoPHFW and DoME, MP
2. Principal Secretary, DoPHFW, MP
3. Principal Secretary, DoME, MP
4. Chief Executive Officer, Ayushman Bharat “Niramayam” for communication to Dean/Superintendent/Hospital In-Charge of Contracted Hospitals for COVID-19
5. President IMA, MP
6. President Nursing Home Association, MP

Commissioner Health
Directorate of Health Services
Madhya Pradesh