Hospital Preparedness for COVID-19

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Outline of Presentation

• Why hospital preparedness?
• Objectives of hospital preparedness
• Hospital Planning for COVID-19
• Infection Prevention and Control Practices
• Surge capacity to deal with large number of patients of COVID-19
Why Hospital Preparedness?

- COVID-19 is highly infectious, main driver being direct transmission through droplet and contact.
- Several Nosocomial infections with COVID-19 have been reported.
- Hospitals may itself become the hub of transmission.
- Large number of cases may have to be managed
Objectives

- Provide prompt clinical care to cases of COVID-19.
- Manage large number of cases in the context of a major outbreak
- Adequately train and equip healthcare staff for managing the cases
- Prevent the spread of respiratory diseases including COVID-19 within the facility
- Provide timely and regular information to the surveillance system
- Establish mechanism for external communication with public
Hospital Planning for COVID-19

Emergency Planning - Incident Management System/ Committees

➤ The hospital will review its DM plan and exercise this plan, identify gaps if any.

➤ Review the Incident Response System and/or the Committee system whichever the hospital is following.

➤ Ensure that there is clear role and responsibilities for the hospital functionaries
Hospital Planning for COVID-19 (Cont.)

OPD Planning

• Designate a nursing officer (and an alternate officer) to manage the triage station and direct the patients.
• Identify areas for initial screening and triage.
• Separate OPD: Flu like illness/ SARI.
• Keep provision of triple layer surgical masks for the patients and bio-hazard bags for their disposal.
• Provide hand sanitizer at the entry and in doctor’s chambers/stations. Alternatively provision for hand wash.
• Ensure prominent display of messages on signs & symptoms and preventive measures for COVID-19/run videos to create awareness among patients.
Hospital Planning for COVID-19 (Cont.)

Indoor patient care planning

- Patients needs to be isolated in negative pressure rooms or separate isolation rooms (in alignment with the strategic approach)
- In resource constrained settings, use separate isolation ward for cohorting suspect and confirmed cases, with a waiting area for the visitors.
  - Such wards should have good ventilation and natural lighting
- Ensure facilities for ventilator and critical care management with trained manpower
- It's desirable to have ECMO facility for critical care in tertiary institutions and it's linkage to designated hospitals
- Provision for hand sanitizer with every bed/hand washing facility in the ward
- Provide triple layer surgical masks to all patients
- Ensure proper cleaning and disinfection of environmental surfaces and equipment in patient’s room
Hospital Planning for COVID-19 (Cont.)

Patient transportation within hospital and referral

• Minimize the movement of patients within the health center
  – Limited to medically essential purposes
• If a patient needs to be moved, plan the move ahead:
  – provide a mask to the patient
  – Disinfection of the environmental surfaces of the patient care area
• Earmarked ambulances for patient transport and referral
• Ambulance staff should use appropriate PPE
• Facility for disinfection of patient’s room after discharge
• Facility for disinfection of the ambulances
Hospital Planning for COVID-19 (Cont.)

Infection Prevention and Control Practices

• Restrict visitors access and their movement within the facility
• Provide triple layer surgical masks to visitors attending the patient
• Provision for hand sanitizer/hand wash with soap and water whenever leaving the isolation wards
• Perform regular environmental cleaning and disinfection
• Maintain good ventilation, if possible, open doors and windows
Hospital Planning for COVID-19 (Cont.)

Surge Capacity

• In large outbreaks/community wide transmission, large number of beds needs to be created.
• The surge capacity can be enhanced by:
  – Reverse triage
  – Addition of existing but non-essential beds to isolation facilities
  – Creating new wards
  – Temporary hospitals
  – Mobilize manpower from neighboring districts
  – Leverage services of healthcare workers in non-critical departments
  – Earmarking beds in private hospitals
Hospital Planning for COVID-19 (Cont.)

- Information management
- Facility should train identified persons on data management
- Daily logging and reporting would be done to IDSP on (daily and cumulative):
  - Total number of suspect cases
  - Total number of confirmed cases
  - Total number of critical cases on ventilator
  - Total number of deaths
Hospital Planning for COVID-19 (Cont.)

Logistic management

• Material logistics
  – Stock adequate quantities of PPE Kits, N-95 masks, triple layer surgical masks, gloves etc.
  – Hand sanitizers and disinfectants
  – Sample collection kits, VTMs and packaging and transportation arrangements
  – Ventilators and other critical care equipment
  – Drugs, IV Fluids and other medical consumables
Hospital Planning for COVID-19 (Cont.)

- Business continuity
- Rostering
- Prevent burn-out
- Maintain positive environment
Hospital Planning for COVID-19 (Cont.)

Training and exercises

• Sensitize healthcare workers on:
  – COVID-19 disease
  – IPC practices
  – Correct use of PPEs
  – Rational use of PPEs: Risk profiling and appropriate use of PPE

• Conduct exercises on IPC practices, patient transport, sampling etc.
## Alignment of hospitals with strategic approach

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Strategy</th>
<th>Hospital facility</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Travel related cases</td>
<td>Prevention of further spread in community</td>
<td>Designated hospitals attached to airports/ports/land border crossings</td>
<td>Isolation in individual isolation rooms of all suspect and confirmed cases</td>
</tr>
<tr>
<td>Reporting of cluster</td>
<td>Prevention of further spread through cluster containment</td>
<td>Nearest hospital identified to the cluster</td>
<td>Isolation in individual isolation rooms of all suspect and confirmed cases</td>
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<td>Large outbreaks</td>
<td>Mitigation using ABC categorization</td>
<td>OPD Triage facility, surge capacity for indoor isolation in wards/temporary hospitals Admission policy as per risk categorization</td>
<td>Home care for mild and moderate cases and hospital admission only for high risk cases and those requiring critical interventions</td>
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<tr>
<td>Disease becomes endemic</td>
<td>Programmatic approach</td>
<td>As above</td>
<td>As above</td>
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Thank you