Setting up an Incident Command Center to focus your COVID-19 response

Mustapha Saheed, M.D.

A virtual seminar series

Upcoming Seminars

April 30- COVID-19 Modelling and Diagnostics

May 05- Building an Institutional Response and Capacity Strengthening

May 07- Supporting Your Healthcare Workforce (PPE, Burnout, Team Structures)

May 14- Emerging Human Rights Issues in the COVID-19 Response

Date TBD- Monitoring and Evaluating Your Institutional Response to COVID-19
Quick Look – WHO case definition

A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset.

A patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case in the last 14 days prior to symptom onset.

A patient with severe acute respiratory illness AND requiring hospitalization AND in the absence of an alternative diagnosis that fully explains the clinical presentation.
Translating International and National to Our Hopkins System
Regional and Local Community
Create Distinct Areas COVID Isolation vs. Non-COVID patients.
### JHU – COVID-19 screening criteria

<table>
<thead>
<tr>
<th>Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Documented or Reported Fever</td>
</tr>
<tr>
<td>Shortness of breath</td>
</tr>
<tr>
<td>Cough</td>
</tr>
<tr>
<td>Sore throat</td>
</tr>
<tr>
<td>Muscle aches (myalgias)</td>
</tr>
<tr>
<td>New loss of sense of smell or taste</td>
</tr>
</tbody>
</table>

**HAVING ONE OF THE ABOVE CRITERIA = COVID ISOLATION**
COVID-19
Tent Triage Protocols.
### Hopkins Testing Algorithm

#### TIER 1

| Patient being admitted | AND | Respiratory Failure | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Calling your Infection Control representative is required. |
|------------------------|-----|---------------------|---|------------------------------------------------------------------|

| Patient is a healthcare employee (regardless of intent to admit) | AND | TWO of the following that are not explained by an alternative diagnosis: documented or reported fever, acute onset cough, sore throat, new shortness of breath, myalgia | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Calling your Infection Control representative is required. |
|------------------------|-----|----------------------------------|---|------------------------------------------------------------------|

| Patient at high transmission risk: such residents in homeless shelter, long term care facility, correctional facility or attends hemodialysis (regardless of intent to admit) | AND | ONE of the above symptoms AND known laboratory-confirmed COVID-19 exposure | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Only call your Infection Control representative if the patient is being admitted. |
|------------------------|-----|-------------------------------|---|------------------------------------------------------------------|

| Patient at high transmission risk: such residents in homeless shelter, long term care facility, correctional facility or attends hemodialysis (regardless of intent to admit) | AND | One of the following: Acute unexplained loss of smell or taste | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Only call your Infection Control representative if the patient is being admitted. |
|------------------------|-----|-----------------------------|---|------------------------------------------------------------------|

### TIER 2

| Patient NOT being admitted | AND | TWO of the following that are not explained by an alternative diagnosis: documented or reported fever, acute onset cough, sore throat, new shortness of breath, myalgia | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Calling your Infection Control representative is required. |
|---------------------------|-----|-----------------------------|---|------------------------------------------------------------------|

| Patient NOT being admitted | AND | ONE of the above symptoms AND known laboratory-confirmed COVID-19 exposure | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Only call your Infection Control representative if the patient is being admitted. |
|---------------------------|-----|-------------------------------|---|------------------------------------------------------------------|

| Patient NOT being admitted | AND | One of the following: Acute unexplained loss of smell or taste | → | This patient should be tested. Order Influenza and COVID-19 testing. 
 Only call your Infection Control representative if the patient is being admitted. |
|---------------------------|-----|-----------------------------|---|------------------------------------------------------------------|

#### TIER 3

<table>
<thead>
<tr>
<th>Patients NOT MEETING Tier 1 or Tier 2 criteria DO NOT need to be tested for COVID-19. If Tier 3 patients have influenza symptoms:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Consider prescribing oseltamivir.</td>
</tr>
<tr>
<td>• Discharge with instruction for home isolation and follow up if symptoms worsen.</td>
</tr>
</tbody>
</table>
New Building - Technical Advantages
ED Layout: Negative flow and HEPA filtration

- Two separate EDs: COVID-19 vs. non
- Separate triage locations (ambulance bay for COVID-19)
- Different teams
  - staff in COVID Zone has the equipment, supplies and personal preparedness for managing suspected COVID patients
- Cohorted resuscitation rooms
- Processes and protocols to minimize staff exposure
- Next best options in the setting of resource limitations?
**PPE Management**

**Why is there need for PPE management?**

**Interim Estimate of US PPE Needs for COVID-19**

<table>
<thead>
<tr>
<th>Incremental need for a single 100-day COVID-19 wave, assuming strict social distancing (rounded to nearest million)</th>
<th>US Total</th>
<th>Per capita (US pop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gloves (combined sterile and exam gloves of all types and sizes)</td>
<td>3.393 billion</td>
<td>10.28</td>
</tr>
<tr>
<td>Medical-grade masks (combined surgical, procedure, and isolation masks of all types)</td>
<td>321 million</td>
<td>0.97</td>
</tr>
<tr>
<td>Isolation gowns</td>
<td>179 million</td>
<td>0.54</td>
</tr>
<tr>
<td>N95 or similar disposable respirators</td>
<td>57 million</td>
<td>0.17</td>
</tr>
</tbody>
</table>

(JHU Bloomberg School of Public Health & Center for Health Security)
Minimal composition for PPE set to manage suspected or confirmed cases of 2019-nCoV (OSHA)

- **Hand protection**: Gloves
- **Body protection**: Gowns (Long-sleeved and water resistant)
- **Eye/face protection**: Goggles, face shield
- **Respiratory protection**: NIOSH-certified, disposable N95 filter facepiece respirators or better
TIERED RESPONSE to PPE

Aerosolizing Procedures -
*Ex. Intubations, Bipap, Nasal Sample

PUI - Persons Under Investigation

All other patients - asymptomatic
Initial Focus on Aerosolizing Procedures
Staff/Patient Safety - Asymptomatic Spread - Good Practices.
Questions?
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