

Global Response to COVID-19 for Emergency Healthcare Systems and Providers: From the IFEM Task Force on ED Crowding and Access Block

Coronavirus disease (COVID-19) was declared a pandemic by the World Health Organization (WHO) on March 11, 2020. (1). As of March 23, 2020 the virus has since affected 173 countries with over 350,000 confirmed cases and over 15,000 deaths.(2)

This press is to confirm IFEM support for methods that must be enacted immediately to protect the integrity of global health care as defined by the WHO. (3)

1. Immediate and aggressive measures to limit transmission of COVID-19.

- Social distancing (more than 2 meters),
- Screening tools should be available (18) plus clear instructions for:
 - >Self-isolation of symptomatic individuals
 - >Self-quarantine of exposed individuals
 - >Work quarantine for frontline healthcare workers
- The cancellation of all large gatherings ('large' determined by region-specific guidelines) (17),
- Closing of non-essential venues, and
- Cancellation of non-essential services
- Laboratories and public health must be strengthened so that adequate testing is available (there are currently shortages of test supplies in a number of countries) and case and contact follow-up can be done.

2. Ensure that frontline providers have adequate PPE or PPE alternatives if resources run out.

Adequate personal protective equipment, including N95 respirators, surgical masks, eye and face protection, gowns, and gloves, should be available for all healthcare workers and used in accordance with WHO guidance. PPE depletion is inevitable in some regions and the need for immediate conservation globally is essential, such as:

- Using a surgical mask or N95 for as long as possible during a shift, changing only if wet, contaminated or felt to have degraded in protection
- Using washable gowns
- Re-using forms of PPE that can be safely cleaned e.g. goggles, some face shields etc.
- Limiting staff who see patients and ,
- Implementing tele-medicine where possible

In addition, engaging engineers and respirator or mask design experts to collaborative design protective systems that can be made with local resources is essential. The current use of a "bandana" or "face scarf" when resources are gone, is not known to be safe.

Specific materials that can filter the virus need to be identified for mask replacement. These must be readily available and be presented in a way they can be readily used to protect HCW, while awaiting resupply. In addition the value of UV light or microwave technology in sterilizing materials for re-use needs to be determined.



3. Vulnerable clinicians must be protected.

Healthcare providers at risk of developing serious disease (e.g. age over 60, underlying comorbidities, immunosuppressed) should have work assignments that limit their exposure, including telemedicine responsibilities. (19) Emergency Departments should develop institution-specific policies regarding staffing based on demographics of emergency care providers.

4. Vulnerable populations in the Community must be protected

The elderly, those with co-morbidities, mental health or other individuals who rely on others for support are at risk. This includes those who live in nursing homes, live in high-density housing, and the homeless. With early identification of these individuals or institutions, local community volunteers and families can set up phone monitoring, and clinicians can support this with telemedicine. Mobile visits can be done to insure these groups have adequate basic supplies such as food, medications etc, and be directed for medical assessment as needed.

5. Create and preserve hospital capacity

In many countries, even with appropriate containment, mitigation, and suppression measures, it is expected that the surge of patients requiring hospitalization and intensive care will overwhelm current hospital capacities. Countries expecting this surge should prepare adequately – this may involve:

- cancelling elective surgeries
- transferring all patients not requiring hospitalization to outpatient care, and
- increasing hospital and ICU bed capacity.

6. Immediate emergency department functional re-design

Separate high risk Covid 19 and low risk Covid 19 Patient care areas and staff where possible.(21) The International Federation for Emergency Medicine recognizes the emergency care systems around the world will vary in their capacity to respond to a surge of patients. (20) Preparations should include

- COVID 19 Testing away from hospitals for worried well or mildly ill
- COVID 19 Assessment in a designated area near or in the hospital with the capacity to do limited tests such as chest x rays, minimal labs for the purpose of determining if admission is needed, AND
- Preserving an area in the ED for only acutely ill suspect or known COVID 19 patients who need resuscitation
- Designated COVID 19 inpatient wards and intensive care units.

Forward deployment of resources (pre-hospital) such as mobile Covid 19 teams that can set up clinics or provide care at nursing homes, shelters etc, and ambulances for the care of COVID-19 cases is recommended if possible (16).

It is essential that in this surge, the care of all low risk-COVID 19 patients are not forgotten, and they become unrecorded casualties in this pandemic.

Mild influenza-like illnesses should be diverted from triage in the emergency department, reserving it for higher acuity cases.



7. Deployment of ALL health care providers including learners must be considered.

To do this organization must examine the skills of the learners and match them to the tasks expected and support them with staff and or telemedicine.

For example:

- retired or at risk clinicians can do telemedicine.
- medical, nursing, paramedicine students etc. can support low acuity clinics such as testing sites or immunization centres when a vaccine is available

Deployment of non-medical volunteers to providesupport for the vulnerable in the community assist in hospitals in appropriate capacities or even work on higher technical problems such as challenges related to PPE shortages, etc.

8. Palliative Care

Emergency clinicians will be called onto provide palliative care as opposed to acute interventions for patients who have little hope of survival. This should be done within an ethical framework and in a manner that is compassionate to the individual and the family, while protecting family members from inoculation.

Finally, ALL Institutions must prioritize the physical and psychological needs of staff. (22)

IFEM recognizes COVID-19 will affect some countries more than others, and the response should be tailored accordingly. Nevertheless, in countries where there is risk of significant spread, immediate actions outlined here must be taken to minimize the impact of this virus. IFEM can play a role in information sharing and support between international emergency medicine clinicians.

For any questions related to this press release or this topic, please contact Eddy Lang (eddy.lang@albertahealthservices.ca), Kim Hansen (hansenke@gmail.com) or Arshia Javidan (arshia.javidan@mail.utoronto.ca). Laurie Mazurik (lmazurik@gmail.com)

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