RIGHT TO CARE

COVID-19 DATA ANALYSIS AND ADVICE GROUP

TECHNICAL ADVICE DOCUMENT

DISASTER MEDICINE:

HOSPITAL PREPARATION ACTION PLAN 1

(THESE ACTION PLANS WILL BE RELEASED AS SEQUENTIAL NUMBERED ACTION PLANS TO BE USED BY HOSPITAL TO PREPARE FOR THE COVID-19)

The Actions Plans are presented as a free service to hospitals by the panel and by Right to Care

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1.1 LIST OF FIGURES

2 ACTION PLAN 1

Based on the Disaster Medicine literature and personal experience the following action plan is recommended for hospitals AT THIS STAGE preparing for the Pandemic.

This technical advice document must be read along with the Plan to Manage COVID-19: Spatial Response Strategy for the Epidemic (Republic of South Africa, 2020).

2.1 HOSPITAL DISASTER MEDICINE TRAINING

Train as many staff as possible in the short period using the online free mini **Hospital Major Incident Medical Management and Support (H-Mimms) course.** This includes:

- Free online manual to prepare/update the hospital's Disaster/Major Incident Plan and to prepare staff for the Pandemic.
- Free online modules to ensure staff understand the concepts and can apply it.
- Pay special attention to train staff the **Triage Sieve and Sort** to be used for prioritisation in the Reception Phase of patients after COVID-19 screening.
- Detail on free offer for Mini-H-MIMMS and Triage posters are available for download on www.crisismedicine.co.za.

2.2 TRAINING IN THE COVID-19 INFECTION CONTROL GUIDELINES

Use the NDOH Guidelines and train staff in the COVID-19 Infection Prevention and Control Guidelines for South Africa.

- Guidelines will be available online at NICD Website within days.

2.3 CALCULATE THE HOSPITAL'S SURGE CAPACITY

Use the guidelines in the South African Disaster Medicine Textbook (Wallis & Smith, 2011) to calculate:

- **ICU Space**: Additional space within hospital complex that could be commissioned for temporary Intensive Care Ventilation facilities, taking space, gas supplies, suction supply and electrical sources into account for example theatre recovery rooms, ward treatment/dressing rooms and suitable ward space.
    - Space 8m²
    - Spacing 2,5 m nose-to-nose (prefer 4m)
    - Oxygen outlet – a Y-type manifold can be used to create two outlets
    - Suction outlet
    - Medical air outlet - preferred but some ventilators do not require medical air
    - Power supply with back-up generator – multiplugs with trip switch can be used
- **Ward Space: Additional** ward space that can be opened-up:
    - Wards not in use / in use for other purposes.
    - Suitable space within the complex that can accommodate patients with low dependency needs such as physiotherapy gymnasiums, parking garages, ward-dining rooms.
        - Space 6 m²
        - Spacing 2 m nose to nose
        - Ablution facilities:-
            - Shower: 1:12
            - Urinals: 1:20
            - Toilet: 1:12
            - Basins 1:12
- Detail guidelines to calculate surge capacity is available in the Disaster Medicine Textbook (Wallis & Smith, 2011). These applicable sections from the Disaster Medicine Manual is available for download on www.crisismedicine.co.za.
- Get contractor/work team to assess hospital beds in storage for repair and cannibalising broken beds and using the parts to repair others. (This has proven a very basic, but very effective action in the Ebola outbreak in West-Africa).

2.4 VENTILATORS

Check for unused or unserviceable ventilators (including old ventilators in storage) and have these serviced as a reserve.

- Classify ventilators in: ventilators requiring piped medical air versus ventilators with own compressors.
- Compressor driven ventilators are ideal to use in improvised areas where no piped medical air is available.

2.5 OXYGEN SUPPLY

Check on contract for oxygen cylinder refills and available regulators in order to be able to supply oxygen in available surge areas that currently have no oxygen supply.

- Confirm refilling turnaround time with oxygen supply contractor. (European hospitals ran out of oxygen and turnaround time for refills were too long to address needs.)
- Check on availability of correct type of oxygen regulators for cylinders available (bull-nose versus pin index). Having broken regulators fixed and check on stock availability is required.

- Check on high-pressure regulators for driving emergency/transport ventilators from cylinders. (This often requires the coupling of a standard hospital oxygen outlet to the regulator to accommodate ventilator oxygen couplings and takes time to have it prepared).

2.6 TRIAGE SCREENING AREA

Plan / evaluate the envisaged/used Triage area for COVID-19 screening, testing and then triage for acuity.

- Plan for the possible additional tented facilities or converting open areas for the purpose, for example part of the parking garage or entrance lobby.
- Use outlay flow chart as a guide to check outlay.
- Evaluate the need to establish a separate treatment area for the mild Priority 3 cases arriving at the hospital

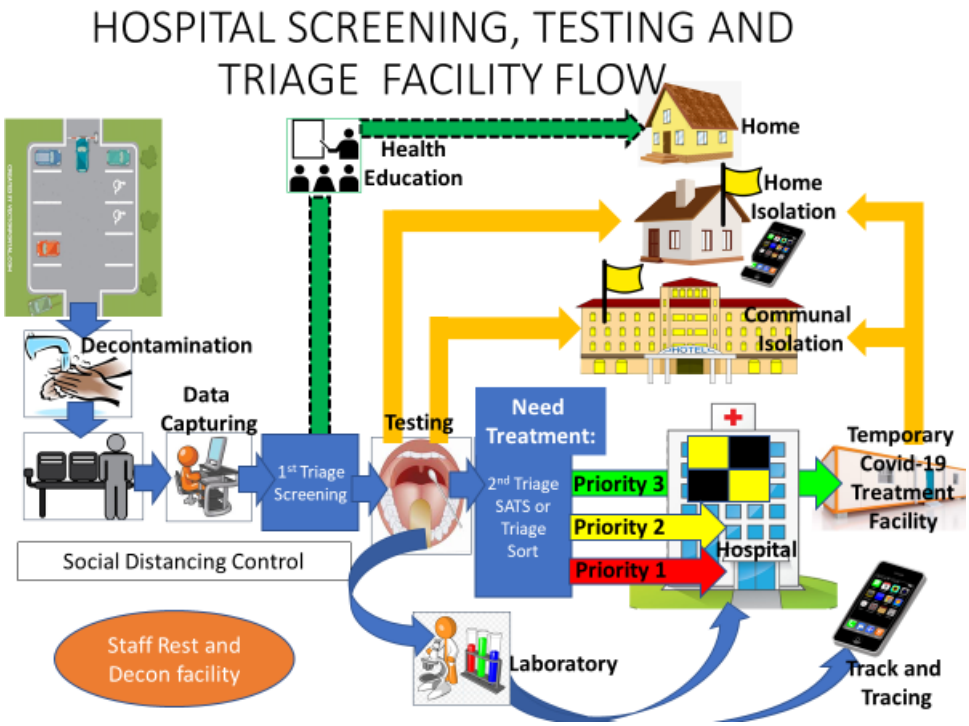

Figure 1: Flow Chart Screening and Triage Facility

This action plan will be followed by a sequentially numbered Action Plan continuing the preparation

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