Interim guidelines for the clinical management of COVID-19 in adults

Australasian Society for Infectious Diseases Limited (ASID)

*These guidelines apply to hospitalised patients with **confirmed COVID-19** (i.e. with positive respiratory sample PCR for SARS-CoV-2), OR to those hospitalised with **provisional COVID-19** (that means a senior clinician considers it a likely diagnosis, not just that they meet the national testing criteria). It is a living document and will be frequently updated. Please consider it a template to aid in development of more detailed or specific local guidelines for your hospital. This guideline applies to the early stages of a pandemic where hospital resources are not yet majorly impacted (e.g. <10% hospital beds occupied by COVID). Other guidelines are in development for a tiered approach.*

1. Assessment for hospital admission

- Where possible patients with a provisional or confirmed COVID-19 diagnosis should be managed out of hospital (e.g at home or in a stepdown facility), as per local jurisdictional policies.
- If patient suitable for care at home, discuss with local public health unit (DHHS in Vic/Tas) to ensure appropriate disease control measures are in place.
- Consider admission if any of: haemodynamically unstable, hypoxaemia (SaO2 on room air <94%), reduced platelet count, comorbidities or unsuitable home environment.
- Discuss all provisional or confirmed COVID-19 cases with the lead of the COVID medical team, or if none available, the Infectious Diseases or Respiratory consultant on call.

2. Patient Placement and Infection Control

- Nurse all patients using **contact plus droplet precautions**, ideally in a single room, and if no single room available, at least 1.5m between patients with curtains drawn; restrict visitors to one at a time, and only close family.
- Use **contact plus droplet plus airborne precautions** (N95/P2 mask rather than surgical mask) and nurse in a negative pressure single room if aerosol-generating procedures are planned or unavoidable, OR for critically ill patients (severe pneumonia with hypoxaemia and frequent coughing).
    - Avoid aerosol-generating procedures if possible. Aerosol-generating procedures include nebulised medications, high-flow nasal prong oxygen, non-invasive ventilation, bronchoscopy, and tracheal intubation.
    - If no negative pressure rooms available, use a single room with the door closed, ideally with 100% air venting

3. Diagnostic work up

- Don't forget differential diagnoses and assess as per usual practice.
- If meet severe CAP criteria and COVID test pending, investigate as for severe CAP (https://tgldcdp.tg.org.au/etgcomplete).
- Ensure multiplex respiratory PCR in addition to SARSCoV-2 PCR (if not already done). Take baseline serum for storage in case paired SARSCoV-2 serology needed later on.

4. Monitoring of proven or suspected cases

- Monitor CRP, FBC, EUC, and LFTs every 1-3 days, depending on severity
- Do baseline 12-lead ECG
- Repeat CXR only if clinically indicated (e.g. if patient is deteriorating or has been recently intubated)
- There is no need for routine CT scanning, only CT scan if clinically indicated
- If patient is critically unwell, monitor coags, troponin I and perform bedside echocardiography (if in ICU and available)
- If SARS-CoV-2 PCR is negative and strong clinical suspicion for COVID-19 remains:
    - Continue isolation and treatment of patient as provisional COVID-19 diagnosis
    - Repeat SARS-CoV-2 swab as soon as possible; add stool PCR if loose stool; repeat serology if symptoms present >7 days
    - CT scan chest if not already done

5. General management

- Give supplemental oxygen, starting with nasal prongs (0.5-3l/min) if O2 saturations <92% or significantly below baseline.
- Use restrictive fluid strategies, 1-2 litres of IV fluid per day, only if no oral intake or clinically dehydrated.
- If hypotensive, administer 250ml fluid boluses and refer to ICU for vasopressor therapy if patient remains hypotensive after 2-3 boluses.
- Prescribe antibiotics for bacterial pneumonia if hypoxaemic (<92%), pleural effusion or purulent sputum (for choice of antibiotics, use CAP guideline in first 72h, HAP if >72h, as per eTG or local institutional pneumonia guidelines)
- Pending influenza flu PCR result: Prescribe oseltamivir 75mg BD (or renally adjusted dose) if symptom onset<48h ago and not critically ill, or <7 days ago if critically ill. Cease if influenza PCR negative
- Commence DVT prophylaxis as per standard local guideline
- Avoid use of nebulisers - use metered dose inhalers with spacers where possible. If a nebuliser must be utilised, airborne infection control precautions are required.

4. Adjunctive and antiviral drugs

- There are no proven pharmaceutical treatments for COVID-19 other than supportive care
- Avoid corticosteroids unless there is an evidence-based indication for them e.g. severe acute exacerbation of COPD or asthma

- **Do not use antivirals outside the context of a randomised controlled trial**. No antiviral or immunomodulatory agent has thus far been proven effective in clinical trials, and they may even be harmful and/or in short supply

5. Escalation of Care

- **Do not refer to ICU if** the patient has an advanced care directive or resuscitation plan precluding ICU care

Hospitals with ICU

- Refer urgently to intensive care if patient:
    - Requiring ≥ 40% FiO2 to maintain O2 saturations ≥ 92% (or acceptable sats in those with lower baselines), or rapidly worsening tachypnoea or hypoxaemia
    - Haemodynamic instability

Hospitals without ICU

- Consider need to transfer patient early to a higher-level facility with an ICU
- Consider infection control implications of patient transport, and whether intubation required prior to transfer, as per local retrieval team policies

6. Management of respiratory failure

- Minimise use of high flow nasal prong oxygen as much as possible (s
- Use of non-invasive ventilation (NIV) is **not recommended**. NIV for COVID-19 is associated with a high failure rate, delayed intubation and possibility increased risk of aerosolisation with poor mask fit
- Aim for early intubation and positive pressure ventilation in those who are deteriorating
- For details on ventilator strategies and other management, see ANZICS guideline (link above).

7. Discharge planning and release from isolation

- A patient with confirmed COVID-19 may be released from isolation **only** if they meet all of the following criteria:
    - the person has been afebrile for the previous 72 hours
    - be at least 10 days after the onset of the acute illness
- If a patient with a provisional or confirmed COVID-19 diagnosis is planned for discharge **prior** to meeting the above criteria, discuss with the local public health unit/DHHS