


Guidance Document for COVID-19



Title: Northwestern Ontario (NWO) Small and Rural Hospitals COVID Management Response	Version #: 1
Pre-Approved for IMT: Operations Section Approved: Incident Management Team Signature: 	Approval Date: December 30, 2020
<i>This document is intended to provide guidance to staff/professional staff during COVID-19</i>	

1. PURPOSE

To clarify expectations during COVID-19, related to Northwestern Ontario (NWO) small and rural hospitals COVID management response.

2. GUIDELINES (e.g. background, definitions, procedure, etc.)

Principles:

There are several principles that apply to decision making about cohorting of patients who are COVID positive or high risk COVID suspect patients.

Key among these are:

1. Equitable access to high quality tertiary care in a timely way should be available for all those who might benefit from that level of care, regardless of their community of origin.
2. Maintenance of high quality service to non-COVID patients in all community hospital sites
3. Care available as close to home as possible for those who understand and accept the limitations of that care, and who would choose palliation should their illness deteriorate.
4. Emergency care, including emergent intubation and short-term ventilation, must be available at all sites for those patients who deteriorate acutely prior to planned transfer to Thunder Bay Regional Health Science Centre (TBRHSC).
5. Capacity at each of the sites should be optimized, including where intubation expertise and secondary level two ICU capacity exists Lake of The Woods District Hospital (LDRH). Private rooms need to be maximized for COVID+/PUI patients.
6. Management of the acutely deteriorating patient would ideally be provided in the setting where technical expertise exists, particularly as regards intubation and ventilation management, and early transfer would be beneficial to support this.

Challenges:

1. Limited access to long term ventilation and intensive care for patients in most of NW Ontario's rural sites
2. Delay in test turnaround time for COVID suspect patients limits the ability to identify in a timely way those patients who may most benefit from tertiary care. There will be risks to cohorting COVID suspect and COVID positive patients. Given the delays in test results, some patients who are COVID suspect would likely remain in their home facility for several days before being

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identified as COVID positive. This diminishes the value of the plan for cohorting patients centrally from a patient safety standpoint.

3. Limited access to transportation service through ORNGE if there is a high volume of patients with acute care needs.

Elements to consider:

1. **COVID suspect vs. COVID positive** : There will be many patients who present to ER who are “COVID suspect” patients based a positive symptom screen. In the absence of a timely swab result, those patients who are ‘highly suspect’ (bilateral infiltrates, hypoxemia, lymphopenia) should be offered Regional Critical Care Response Program (RCCR) consultation with the Intensivist pending their swab result to discuss the case, as well as context specific issues like local human resource limitations and difficulty isolating a COVID suspect patient from other non COVID patients on the acute care ward.
2. All patients with Covid-19 symptoms or suspected of having Covid-19, who reside in isolated communities where travel to an ICU might be > 2 hours, should receive in-community rapid swabbing for COVID-19, if available, in order to accurately identify those who would most benefit from cohorting care. All such COVID-19 positive patients, as well as those who are highly suspect, should have the opportunity or be encouraged to have consultation with an Intensivist through RCCR for consideration of transfer based on the individual case as well as the local context specific issues.
3. All patients should be assessed at presentation to community hospitals for their goals of care. Those who would choose no invasive therapy should remain in their community hospital for best care possible within the limits of that facility, and transition to palliative care should that become the illness trajectory.
4. Some patients may be COVID19 positive who do not yet require hospitalization but are at risk of acute deterioration and hospitalization (ie. High risk by virtue of age and co-morbidities) and these patients should be offered the opportunity to have very close in-community observation and monitoring. Patients who require immediate hospitalization and who wish invasive therapies, should receive RCCR consultation with the Intensivist and discuss options for transfer to TBRHSC at the time of admission.

Two cohorting options then should be available:

- a. A site to allow those who are not yet ready for hospitalization to be supported closer to a tertiary setting so that they are close by in case of rapid decline (BC model) and
- b. Hospital level cohorting (in hospital OR in field hospital as capacity allows.)

The hospitals that have Level 2 ICU beds and on site anaesthesia (LDWH) will consider management of higher acuity hospitalized patients on site with understanding that capacity for technically expert intubation and short term ventilation is locally available should there be acute deterioration of patients.

1. In the event of a significant surge in the region at which point a field hospital would be considered, that field hospital might serve two purposes:

- a. Step up: this field hospital would enable those patients who require very low level support (regular direct observation and oxygen) to receive that care and observation in a setting that would allow them to step up quickly to a higher level of in-hospital care if and when it is needed.
- b. Step down : for patients who no longer require the high level of care within hospital as they convalesce from COVID19 illness, but may still require some level of observation and oxygen support, prior to transfer back to their home community hospital to complete their convalescence
 1. ** the value of step down for rural community patients is likely very limited vs. transfer back to home community as the risk of acute deterioration again is very small once convalescence is established.

An outline of criteria and assessment for consideration of transfer to tertiary services is outlined in the attached document.

COVID CTAS SCORING – NW Region

CTAS-5-COVID

Patient reports only minor viral symptoms. These patients must be advised to self-isolate and follow-up with hospital only if their condition worsens.

- Patient reports only mild cold or flu-like symptoms.
- SpO₂ ≥95% AND a respiratory rate <18 and HR <100.
- If reports dyspnea, purulent sputum, chills, night sweats, consider CTAS-4.
- If patient has a history of diabetes, they qualify for CTAS-5 IF recent A1C <9%.
- If patient has a history of hypertension, they qualify for CTAS-5 IF systolic BP <150.

MANAGEMENT: Remain in self-isolation with phone call to hospital if symptoms worsen. Due to the atypical presentation and progression of COVID-19 these patients must be considered mild COVID-19 patients until proven otherwise but do not require medical intervention. These patients do not require observation at hospital.

CTAS-4-COVID

Patient is clinically stable with symptoms of mild respiratory disease including community-acquired pneumonia but no risk factors or concerning vital signs.

MANAGEMENT: These patients should be assessed in hospital but can return to isolation if deemed reliable for reassessment by phone.

- Swab patient for COVID-19 (and influenza if outbreak in region)

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- Discharge from hospital with written discharge instructions after consultation with MD.
- Patient must be reliably reachable for 24hr follow-up from hospital to assess triage status.
- CONSIDER chest X-ray
- CONSIDER labs, including blood cultures x2 if fever over 38°C.
- CONSIDER PO antibiotics for community-acquired pneumonia IF fever over 38°C or
- Purulent sputum.
 - Amoxicillin 1 g PO TID x 5 days and/or doxycycline 200mg PO ONCE then 100mg PO BID x 5 days.
 - If recent amoxicillin in last 3 months, use amoxicillin-clavulin 875mg po BID x 5 days and/or doxycycline 200mg PO ONCE then doxycycline 100mg PO BID x 5 days.
 - If penicillin allergy, use cefuroxime 500mg PO BID x 5 days and/or doxycycline 200mg PO ONCE then 100mg PO BID x 5 days.
 - CONSIDER oseltamivir IF recent influenza outbreak in region.
- NO nebulized medication
- Encourage patient to lie prone / semi lateral position

CTAS-3-COVID

Patient is clinically stable with symptoms of mild respiratory disease, stable vitals but at least one risk factor on history.

MANAGEMENT: Intensivist should be consulted through RCCR

- Swab patient for COVID-19 (and influenza if outbreak in region)
- For patients with SpO₂ >94%, may be admitted to local hospital.
- For patients with SpO₂ ≥ 92% or ≤94%, consult COVID MD through RCCR.
- Immunomodulatory Therapy (recommended for critically ill and moderately ill patients with suspected or confirmed COVID-19)
 - Dexamethasone 6 mg daily x 10 days (or until discharge; max 10 days)
 - Consider Prednisolone or Hydrocortisone instead for pregnant or breast feeding patients
- Close monitoring for change in triage status with vitals and SpO₂ ± every 6 hours.
- IF SpO₂ <92% AND/OR respiratory rate >24 AND/OR worsening dyspnea, urgently reassess patient and consider re-triage as CTAS-2-COVID.
- CONSIDER chest X-ray
- CONSIDER PO antibiotics for community-acquired pneumonia IF fever over 38°C or
- Purulent sputum.
 - Amoxicillin 1g PO TID x 5days and doxycycline 200mg PO ONCE then 100mg PO BID x 5 days.
 - If significant respiratory co-morbidities or recent amoxicillin in last 3 months, use amoxicillin-clavulin 875 mg po BID x 5 days (ensure renal dosing) and doxycycline 200mg PO ONCE then 100mg PO BID x 5 days.
 - If penicillin allergy, use cefuroxime 500mg PO BID x 5 days and/or doxycycline 200mg PO ONCE then 100mg PO BID x 5 days.
 - CONSIDER oseltamivir IF recent influenza outbreak in region.
- NO nebulized medication

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- Encourage patient to lie prone / semi lateral position

CTAS-2-COVID

Patient has symptoms of moderate or severe respiratory disease AND/OR major physical exam findings AND/OR major immunocompromise.

MANAGEMENT: Intensivist should be consulted through RCCR.

- Swab patient for COVID-19 (and influenza if outbreak in region).
- Initiate SpO₂ and cardiac monitoring (if available.)
- Begin with oxygen therapy as available and appropriate.
- Start IV saline lock.
- Labs
- Start IV ceftriaxone 1g q 24hrs. IF severe penicillin allergy, give levofloxacin 750 mg PO once daily x 5 days
- Start PO/IV azithromycin 500mg once daily x 1 then 250mg PO once daily x 4.
- CONSIDER piperacillin-tazobactam 4.5g IV q6h instead of ceftriaxone if recent hospitalization.
- CONSIDER vancomycin if history of MRSA (ensure renal dosing).
- CONSIDER oseltamivir if recent influenza outbreak in region
- Immunomodulatory Therapy (recommended for critically ill and moderately ill patients with suspected or confirmed COVID-19)
 - Dexamethasone 6 mg daily x 10 days (or until discharge; max 10 days)
 - Consider Prednisolone or Hydrocortisone instead for pregnant or breast feeding patients
- NO nebulized medication
- Encourage patient to lie prone / semi lateral position
- CONSIDER Ventolin via MDI if patient has history of asthma.

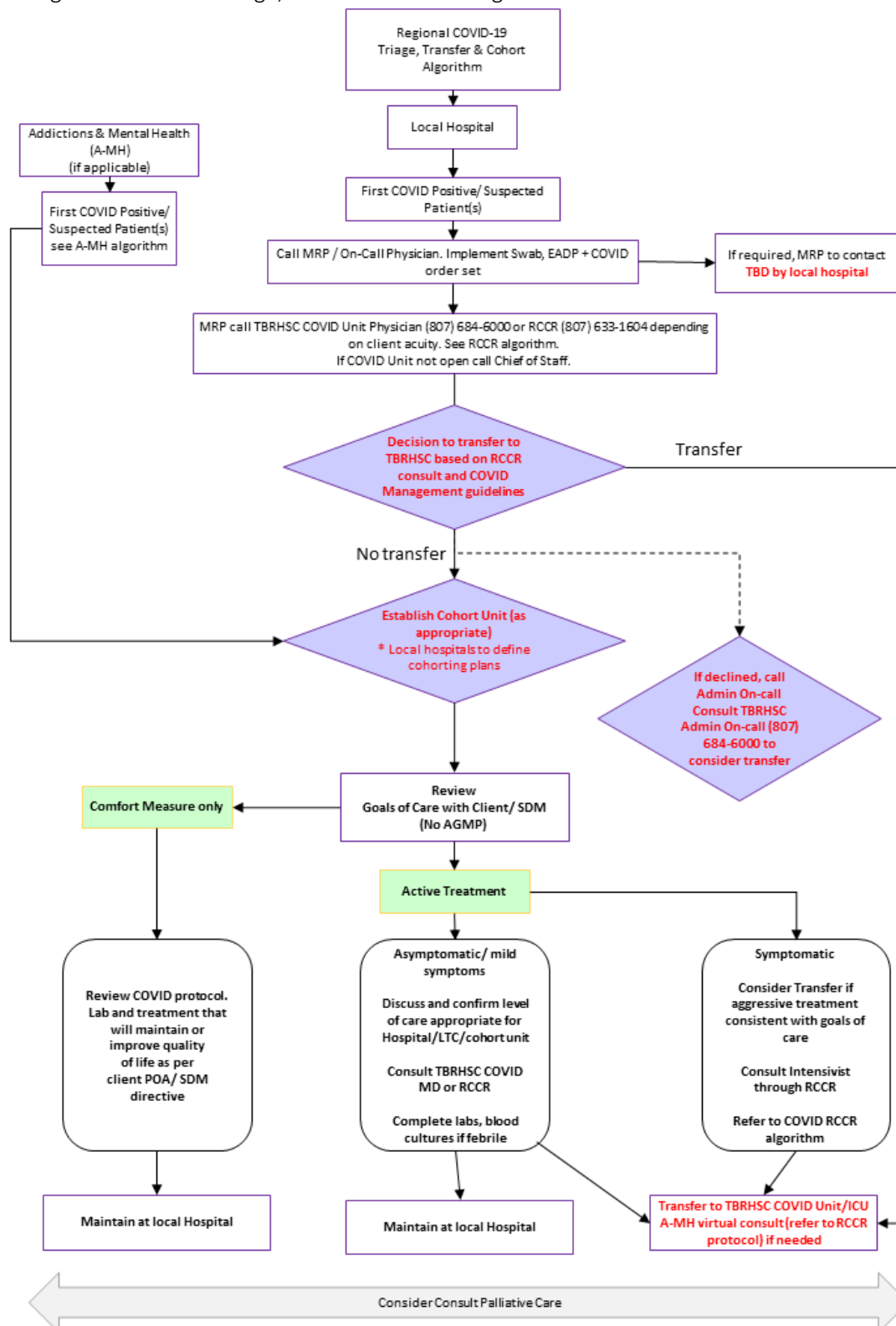
As per Ontario COVID-19 Clinical Practice Guidelines:

[Critically ill patients: Hospitalized, ICU-based patients requiring ventilatory and/or circulatory support; also includes patients requiring high-flow nasal cannula, non-invasive ventilation, or higher concentrations of oxygen by mask]

[Moderately ill patients: Hospitalized, ward-based patients requiring low-flow supplemental oxygen].

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Appendix A Regional COVID-19 Triage, Transfer & Cohort Algorithm



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3. RELATED POLICIES, PRACTICES AND/OR LEGISLATIONS

N/A

4. REFERENCES

1. COVID-19 Northern Ontario Nursing Station Triage Guideline
2. TBRHSC COVID-19 admission order set current as of November 26, 2020
3. NIH COVID-19 Treatment guidelines- Therapeutic management of patient with COVID-19 (last updated December 3, 2020)