

The 'No-Test' Scenario

A SYNDROMIC APPROACH TO COVID-19

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Rationale

As the coronavirus pandemic spreads, there is likely to be limited availability of diagnostic tests for COVID-19 in low-income settings, with demand outstripping supply during a potential surge in cases with critical and severe illness. In this instance, a move to syndromic management of patients with febrile respiratory illness could be adopted to reduce mortality through broad treatment approaches, diagnosis and management of other highly prevalent conditions which can present similarly to COVID-19 and early recognition of the deteriorating patient to enable timely intervention and transfer to a higher level of care if available.

Our aims for this approach are to preserve treatment beds for those with severe illness, and those likely to have a positive outcome. This will require strict triage procedures, treatment approaches and discharge policies that can be standardised nationally.

Scope of document:

For dissemination to all healthcare facilities where suspected COVID-19 patients are likely to present. It is meant to be used in a setting where routine laboratory investigations, COVID-19 specific investigations and radiology are not available – with a focus instead on the clinical presentation of the patient. This clinical assessment does not necessarily need to involve medical personnel with advanced examination skills – it can also be carried about by an experienced nurse, community health officer or similar. This guideline is designed to act as a guide for clinicians and nursing staff, checklists and posters can be printed out and used to optimise patient management. This should not replace specific case management standard operating procedures but should instead provide a more condensed guide to those working in health facilities.

Principles of a syndromic approach

The assumption for the ‘no-test’ scenario is that if this were to occur, there would be no way to distinguish COVID-19 from other conditions presenting in the same way, i.e. ‘acute respiratory illness’ (ARI). In this scenario, there would be the formation of ARI wards or facilities who would receive patients with a clinical syndrome of fever, cough and breathlessness. These ARI wards or facilities would only admit patients with a moderate or severe illness, to reserve treatment beds only for those severely unwell. The approach to patients on these ARI wards would need to reflect the epidemiology of the region – with common causes of breathlessness being considered and addressed in the approach. There is a brief guide to these included in this document but this is by no means exhaustive.

This approach would differentiate severity primarily based on oxygen requirement, with a proposed ‘traffic light’ system applied to all patients at triage to decide on treatment destination. This categorisation is flexible, and clinicians can also determine patients as severe based on overall clinical condition, underlying co-morbidities and risk of deterioration. All ‘red’ patients would be cared for in an ARI facility where oxygen supply is more robust. ‘Amber’ patients will have a lower oxygen requirement and will be cared for in an ARI facility. ‘Green’ patients are those with no oxygen requirement. These patients will be clinically assessed and given treatment according to the likely underlying aetiology. They will be given advice about home care, the symptoms of severe COVID-19 and when to re-present to a health facility in the case of deterioration.

Weaved into this syndromic approach will be guidelines for how to approach patients who are severely hypoxic and unlikely to have a positive outcome. This type of patient is colour-coded as

purple. If we identify this patient early in the process, we can focus more on symptom alleviation using pharmacological and non-pharmacological therapies to make them as comfortable as possible. It also means that scarce resources such as oxygen and beds in ARI facilities are reserved for those more likely to survive, which will save more lives in the long-term. In many countries, there is a tendency to hope for improvement, and reluctance to acknowledge deterioration, dying and the need for end-of-life care. Available care aimed at cure should be continued whilst there is possibility of cure and facilities are available, but there is a need to consider the ethical basis for each individuals' care, bearing in mind dignity and respect for the patient and not doing harm (non-maleficence); and the appropriate use of limited resources (justice). Guidelines for clinicians about how to make these decisions, and guidance for nurses about how to care for patients who may not survive is included in this document.

The threshold for moving to the 'no-test' scenario is in phase 3 of the COVID-19 epidemic- when there is confirmed community transmission and containment strategies become unfeasible in many low-income settings. The threshold indicators would be those related to isolation beds and patients presenting to isolation facilities, as this is where the bottleneck lies in the system when there is a lack of tests. These could include:

- Isolation bed occupancy of >80% over a 3-day period
- A delay in dissemination of test results of >24 hours for 3 consecutive days
- Number of patients presenting that meet case definition > number of isolation beds in a given area for 3 consecutive days

Limitations

This approach would place COVID-19 negative and positive patients together in a health facility. Every attempt would be made to prevent nosocomial transmission of COVID-19 and this is discussed in this document. In addition, to prevent the spread of Tuberculosis in the facility, suspected TB cases will be kept separate from other patients in these facilities. If a patient is confirmed as at risk from the screening questions, or if they are HIV positive with a cough of any duration, they will be cared for in a separate area until their GenXpert result is available.

Summary assessment and management of Acute Respiratory Illness

Identified as Acute Respiratory Illness from screening (see form):

- 2 or more of:
 - Fever >37.5°C
 - Shortness of breath
 - Cough
 - Oxygen saturations <96% on air

NB: Clinicians to be aware that older people and those immunosuppressed (e.g. diabetes) may present with atypical symptoms such as fatigue, reduced alertness, reduced mobility, diarrhoea, loss of appetite, delirium, and absence of fever

All patients: Initial assessment
NURSING:
Vital signs assessment and early warning score
Malaria RDT
HIV test (if HIV status unknown or negative previously)
Random blood glucose
CLINICIAN
History and examination
If HIV negative: Weight loss? Night sweats? Cough >2 weeks?
If HIV positive: Cough of any duration?
Send sputum for GenXpert for M. TB if yes to above screening questions
Severity assessment – see below
Admission vs discharge based on severity assessment

Severity assessment:

RED PATIENT SpO₂ <90% on air, likely to survive – ADMIT

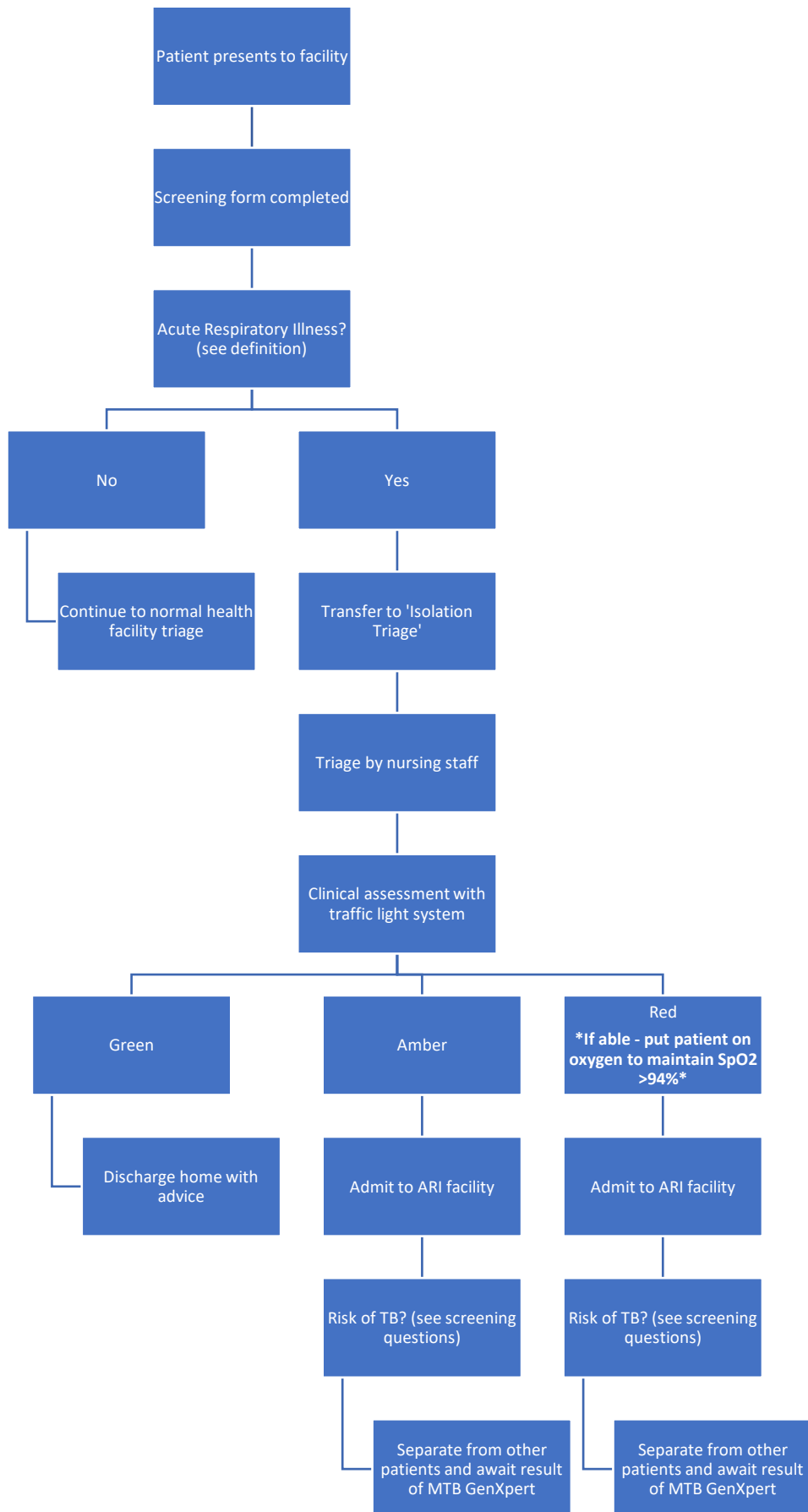
AMBER PATIENT SpO₂ 90-94% on air – ADMIT

GREEN PATIENT SpO₂ >94% on air (no oxygen requirement) – DISCHARGE HOME with advice

PURPLE PATIENT SpO₂ <90% on air and unlikely to survive

Summary management: admitted patients
Oxygen – aim SpO ₂ >94% in critical illness, >90% if stable and not pregnant adult patient
IV fluids if signs of dehydration (see ‘Cardiovascular’ section of deterioration poster)
IV broad spectrum antibiotics if signs of severe sepsis (see deterioration poster)
Thromboprophylaxis
Monitor urine output
Maintain adequate nutrition
If HIV test reactive – complete HIV inpatient checklist and manage according to national guidelines
If GenXpert Mycobacterium TB positive – follow national TB guidelines for management
Consider alternative diagnoses and include in your treatment approach

Process Map: Patient flow at a health facility



COVID-19 Screening Form

Name of screener:			
Telephone no. of screener			
Date:		Time:	
Patient name:			
Date of birth/age:			
Hospital ID Number:			

For completion by screener:			
Symptoms	Temperature: Is it >37.5°C or history of fever?:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	Cough <i>a new continuous cough which means coughing a lot for more than an hour or having 3 or more coughing episodes in 24 hours:</i>	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	Shortness of breath?	Yes <input type="checkbox"/>	No <input type="checkbox"/>
	Oxygen level: Is it <96%?:	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Do they have 2 or more of: fever, shortness of breath, Oxygen level <96%, cough?		Yes <input type="checkbox"/>	No <input type="checkbox"/>

If yes:

1. Give the patient a mask
2. **Move the patient to the Isolation Triage for further assessment**

Outcome (please circle):	REQUIRES ISOLATION	DOES NOT REQUIRE ISOLATION
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Isolation Triage Process

Outcome 1: 100% of patients are seen by a nurse within 15 minutes of arriving at facility

Outcome 2: Blood pressure, heart rate, temperature, respiratory rate and oxygen saturations measured for every patient by nurse during initial assessment

Outcome 3: Nurse to calculate Early Warning Score (EWS) score from observations for every patient

Outcome 4: Nurses to triage patients based on SLEWS score and escalate as necessary

**** If able and resources allow – nursing staff should immediately put patient on oxygen if their SpO2 is <90%****

Outcome 5: All patients have a malaria RDT performed

Outcome 6: All patients have an HIV RDT performed if their HIV status is unknown

Outcome 7: All patients have a random blood glucose performed

Example Early Warning Score							
Score	3	2	1	0	1	2	3
Respiratory Rate	<8		8-10	10-20	20-24	25-30	>30
Oxygen saturations	<91%	91-93%	94-95%	>96%			
Temp	<35			35-37.5	37.5-39		>40
Systolic BP	<90	90-100	110-100	110-180		>180	>200
Pulse	<50		41-50	51-90	90-110	111-129	>130
AVPU	Unresponsive	Reacts to pain	Reacts to voice	ALERT and not confused	Reacts to Voice	Reacts to pain	Unresponsive
0-4			Continue with routine observations, routine clinical review				
5+ OR SpO2 <90%			INFORM DOCTOR IMMEDIATELY FOR REVIEW				

Clinical Assessment at Isolation Triage

Initial assessment:

Outcome 1: Clinician to assess every patient within 30 minutes of arrival

Outcome 2: Clinician to take a full history and examine the patient

Outcome 3: All patients asked the following screening questions

- If HIV negative: Have you had weight loss, night sweats or a cough for > 2 weeks?
- If HIV positive: Do you have a cough?

Outcome 4: If yes to any of the above questions, patient should have a sputum sample taken and sent for GenXpert testing

Outcome 5: All patients to have a documented 'traffic light' severity assessment written at the front of their patient record

Severity assessment:

Red – oxygen saturations <90% on air, positive outcome likely

Purple – oxygen saturations <90% on air, positive outcome unlikely

Amber – oxygen saturations 90-94% on air

Green – oxygen saturations >94% on air

Outcome 6: All red patients to be put on oxygen immediately and admitted/transferred to an ARI facility

Outcome 7: All purple patients to be admitted to a bed and best supportive care initiated, with a focus on alleviation of symptoms

Outcome 8: All amber patients to be admitted/transferred to an ARI facility

Clinical assessment will conclude with a decision about admission vs discharge home.

This will be based on:

- Oxygen requirement, severity of illness
- Clinical frailty (see clinical frailty poster)
- Presence of one or more of known risk factors for rapid deterioration and increased mortality:
 - Older age (> 60 years)
 - Cardiovascular disease, diabetes mellitus, chronic lung disease, cancer and cerebrovascular disease
 - Smoking

Outcome 9: All green patients to be given a likely diagnosis, provided with a prescription for treatment if required, and discharged home with advice on self-isolation

Requirements for ‘Red’ and ‘Amber’ patients

Acute Respiratory Illness facilities

In some countries this will be a designated COVID-19 facility. In others this will be a ward in a pre-existing health care facility. These facilities will only accept ‘red’ and ‘amber’ patients who have a severe illness and require the highest level of care. There should be a focus on upscaling oxygen capacity at these facilities, a far-reaching intervention that will be sustainable well into the future. See the ‘alternative causes of breathlessness’ part of this document for clinicians to consider when a patient is admitted.

Red patients – guidance from WHO clinical management of COVID-19: 27th May 2020

1. **Oxygen:** if flow rates adequate maintain saturations >94% in critical illness, or if not >90% in stable, non-pregnant patients
2. **Positioning:**
 - a. High supported sitting: put bed upright if able and get patient to sit UP. This will enable more sufficient chest expansion and reduce alveolar dead space
 - b. Prone positioning – if patient able and tolerates. If obese patient consider a pillow under the chest to allow decompression of abdominal contents.
 - i. On front for 30 minutes – 2 hours
 - ii. On right side for 30 minutes – 2 hours
 - iii. On left side for 30 minutes – 2 hours
3. **Fluid management:** if signs of shock, systolic blood pressure <90, tissue hypoperfusion give 250-500ml STAT fluid bolus within 15-30 minutes of arrival and re-assess need for further boluses.
 - a. Cautious fluid management required – aggressive fluid therapy may worsen oxygenation
4. **Antibiotics:** IV broad spectrum antibiotics for all patients admitted in septic shock within 1 hour of arrival
5. **Steroids:** Updated 6th July 2020 with the RECOVERY trial results – dexamethasone oral or IV 6mg OD for 10 days for patients requiring oxygen (see below*)
6. **Thrombosis:** All patients to receive thromboprophylaxis
7. **Nutrition:** Encourage if patient able, consider PPI if patient severely unwell to prevent GI ulceration
8. **Urine output:** catheterise if severely unwell
 - a. Monitor urine output in catheterised patients
 - b. Monitor urine output in non-catheterised patients by measurement of urine in measured bucket/jug
9. **Pre-existing medical conditions.** Continue normal treatment if the patient is taking, unless there is a contra-indication

Other:

- a. **Malaria:** If RDT positive, severity assessment (see treatment poster), treat according to algorithm
- b. **HIV:** If RDT positive or known HIV
 - i. Complete HIV inpatient checklist (see below)
 - ii. Bloods for CD4 count and viral load –free under Global Fund budget

- iii. Consider prescribing anti-retroviral medication according to national guidelines
- iv. Consider high-dose co-trimoxazole with folinic acid supplementation if PCP likely, or prophylactic dose if not
- v. Fluconazole prophylaxis
- c. TB: If GenXpert positive and no signs/symptoms of TB meningitis – start TB treatment according to national guidelines
- d. **Delirium:**
 - i. Address underlying causes of delirium: hypoxia, infection, constipation, urinary retention, acute pain
 - ii. Haloperidol, low dose benzodiazepines if patient at risk to themselves
- e. **Psychosocial support**
- f. **Symptom alleviation**
 - i. Non-pharmacological interventions – distraction, cooling, calming orientation
 - ii. Low dose morphine sulphate 5mg modified release PO for breathlessness
 - iii. Low dose diazepam for anxiety

*Update 6th July – dexamethasone has been shown to reduce mortality in the RECOVERY trial. Mortality reduction greatest in ventilated patients, currently uncertain how this translates to a low-income setting. When prescribing steroids monitor for:

- Hyperglycaemia
- Hypernatraemia
- Hypokalaemia
- Signs of adrenal insufficiency after stopping corticosteroids, which may have to be tapered.
- Strongyloides stercoralis hyperinfection with steroid therapy - diagnosis or empiric treatment should be considered in endemic areas if steroids are used

Amber patients

If there is a high suspicion of COVID-19 as the cause of symptoms, then antibiotics are not recommended in moderate disease. However, if there is a clinical suspicion of bacterial pneumonia - cough productive of white, yellow, green sputum, then consider oral antibiotics if able to swallow. Other management is the same as ‘red’ patients according to need and clinical presentation.

Prevention of nosocomial transmission of COVID-19 and other infections

Patients cared for in ARI facilities will be a mixture of negative and positive cases. They should therefore be cared for in bed spaces that are at least 2m apart. There should ideally be plastic sheeting or another physical barrier between beds that is easily cleaned with disinfectant. Patients should use buckets to go to the toilet and not leave their bed space for any reason, until they are discharged. Ideally a separate set of vital signs equipment should be used per patient. If this is not possible, vital signs equipment will need to be decontaminated between each patient use. When patients become asymptomatic towards the end of their illness, they could be cohort cared for away from patients with more active respiratory illness to prevent re-infection.

Patients that are identified as suspected TB from the assessment process will be cared for away from other patients. Suspect TB cases are defined as HIV negative patients who have had weight loss, night sweats or a cough for >2 weeks, or HIV positive patients who have a cough of any duration.

Purple: Symptom relief and best supportive care for patients who are unlikely to survive

To make the decision among those most unwell with suspected COVID-19 about who is likely to survive and who is not, will be incredibly challenging for clinicians. However, it is imperative that these decisions are made early, as there is a real opportunity to intervene to offer holistic symptom management and psychosocial support, rather than subjecting them to invasive medical care and lengthy, uncomfortable transfers to other facilities.

Clinical decision-making of patients who are unlikely to survive

This decision will be based on a variety of indicators but should consider:

- Co-morbidities
- Degree of frailty – see the Appendices for frailty indicators
- Severity of presenting illness
 - Severity of hypoxia
 - Conscious level

Treatment:

It is important to mention that all symptom-control options are applicable to all patients with COVID-19, not just those who are unlikely to survive.

Non-pharmacological

All patients need to be treated with kindness and reassurance, particularly as they have been separated from their families and usual supports, and are being nursed by staff in PPE, which is frightening.

Strategies to keep patients comfortable:

- Checking for reversible causes of agitation and confusion, such as urinary retention, constipation, pain, dehydration, and resolving these where possible
- Positioning (such as sitting upright and leaning forwards to help breathlessness), relaxation techniques, cooling by use of wet cloth or flannel
- Oral fluids for cough and fever
- Calm surroundings with appropriate lighting
- Explanation, re-orientation and counselling
- Distraction, e.g. with music/radio

Pharmacological

	First-line	Second-line
Breathlessness and cough	Morphine Sulphate Tablets MR (MST modified release) PO 5mg 12 hourly (Max 15mg 12 hourly)	Morphine sulphate immediate release (IR) 2-5mg, 2-4 hourly PRN
Fever and rigors	Paracetamol 1g 4-6 hourly, maximum 4g/24hours (↓dose to 15mg/kg per dose if weight ≤50kg)	Paracetamol 1g PR 4x/day OR by IV infusion over 15mins
Anxiety and agitation	Diazepam 2-10 mg orally, 8-12 hourly	Diazepam 2-5mg PR, SL or BUC 8-12 hourly PRN
Delirium	Haloperidol 500micrograms- 1mg oral 8 hourly PRN	

Home isolation advice for ‘Green’ Patients

This would be for ‘green’ patients – those with symptoms of an acute respiratory illness, with no oxygen requirement. These patients may have other diagnoses highlighted from their initial assessment that require treatment, such as malaria. See the alternative causes of breathlessness guidance below in this document. Prescriptions will be provided for patients to take at home and will be advised about care measures, in addition to those specific for COVID-19.

NB: mild COVID disease – antibiotics NOT recommended

Symptomatic treatment such as antipyretics for fever and pain, adequate nutrition and appropriate rehydration

SAFETY NET: If they develop any worsening symptoms (such as light headedness, difficulty breathing, chest pain, dehydration, etc.), they should seek urgent care

Self-isolation advice

Self-isolate at home (not leave the house) for 7 days

Other people in your household must not leave the house for 14 days

Ask people who are delivering food/supplies to leave them outside the door and not interact with you

Advice regarding warning signs of deterioration and when to re-present to a health facility

Living with someone from a vulnerable group:

If you live with someone who is aged 65 and over, who is pregnant, who has a diagnosed long-term health condition (see below) then if possible, they should move somewhere else in the 7 days after you are seen at the health facility.

If this is not possible then you should:

- Keep 2m away from them at all times
- Use a different bathroom if possible
- Do not share towels
- Do not use the kitchen at the same time
- Do not share a bed
- Decontaminate surfaces such as tabletops, door handles using a detergent several times a day

Examples of long-term conditions:

Asthma, COPD, heart failure, chronic kidney disease, diabetes, high blood pressure, hepatitis, HIV, sickle cell disease

Discharge criteria

In the absence of testing the following criteria for discharge should be adopted:

- In an ARI facility– patients can be safely discharged when they are clinically well with no oxygen requirement
- According to WHO guidelines this is when a symptomatic patient is 10 days after symptom onset, plus at least 3 days without symptoms
- Provide a package of discharge that will include advice on infection prevention and control (social distancing of at least 1.5m, cough etiquette, handwashing) adequate nutrition, and psychosocial counselling to both patients and family members.
- Integrate all patients to their community to prevent stigma regarding admission to a COVID-19 treatment facility

Consideration of alternative diagnoses

INFECTIOUS CAUSES OF FEVER/SHORTNESS OF BREATH/COUGH

Dengue virus

Presentation: fever, sore throat, coryzal symptoms, rash, myalgia, arthralgia, conjunctivitis

Look for: shock, bleeding, decreased consciousness, thrombocytopenia

Requires:

- Early recognition of shock
- Close monitoring of BP, pulse, urine output and capillary refill time.
- Fluid replacement if in shock with 10-20ml/kg/hr crystalloid until condition stabilizes
- Early recognition of fluid overload and to slow fluid replacement

Typhoid fever

Presentation: fever, confusion, cough, abdominal pain, constipation, shock, sepsis

Requires:

- Early recognition of complications such as small bowel perforation, ulceration
- Treatment with fluoroquinolones or 3rd generation cephalosporin

Leptospirosis

Presentation: fever, headache, myalgia, conjunctival suffusion

Look for: history of fresh-water exposure

If severe can cause an aseptic meningitis/encephalitis, renal failure, hepatitis, respiratory distress

Treatment: 3rd generation cephalosporin, doxycycline, erythromycin

Viral haemorrhagic fever – Ebola, Lassa, Marburg, Yellow fevers

Presentation: fever, headache, myalgia, fatigue, conjunctivitis, nausea, vomiting, abdominal pain, sore throat, retrosternal chest pain

If severe: epistaxis, gum bleeding, haematemesis, melaena, bruising

Requires:

- Rehydration

NON-INFECTIOUS CAUSES OF BREATHLESSNESS/COUGH

Consider pulmonary causes:

Do they have asthma? COPD? Is there a history of smoking? Do they have wheeze on auscultation of the chest? Have they had chest pain? Could this be a blood clot (PE) or a pneumothorax? Are breath sounds equal bilaterally?

Consider haematological causes:

Do they have a family history of sickle cell disease? Is there a history of painful crises? Is there a history of bleeding? Have you asked about menorrhagia?

Consider cardiac causes:

Do they have swollen legs? A swollen abdomen?

Is there a raised JVP? Gallop rhythm on auscultation of the heart sounds? Displaced apex beat?

Have they had a history of chest pain? Could they have had a heart attack?

Is there an irregular pulse?

Consider abdominal causes:

Is there abdomen swollen? Are they jaundiced? Do they have an enlarged liver? Is there signs of chronic liver disease? Is their urine output low? Is there a history of chronic kidney disease? Are they itching from uraemia?

Appendix 1: Poster - Signs of deterioration



General

- Extreme lethargy
- Dizziness
- Decrease urine output
- Not eating and drinking
- Sunken eyes, low skin pinch



Respiratory

- Shortness of breath
- Blue discoloration of extremities/lips
- Grunting/wheeze
- Stridor
- High respiratory rate
- Low oxygen saturation



Cardiovascular

- Delayed capillary refill
- Weak pulse
- Cool extremities
- Low blood pressure
- High heart rate



CNS

- Confusion
- Irritability
- Weakness

Appendix 2: Malaria inpatient management algorithm

Malaria Treatment Flow Chart for Hospitals

If signs and symptoms consistent with severe malaria do not await malaria RDT/blood film result before initiating treatment

If no signs and symptoms of severe malaria and a negative RDT/blood film do not start anti-malarials

Alternative treatments for severe malaria:

1. Artemether IM-Loading 3.2mg/kg followed by 1.6mg/kg daily
2. Quinine IV-Loading 20mg/kg followed by 10mg/kg 8 hourly

Alternative treatments for non-severe malaria:

1. If unable to tolerate Artemether-Lumefantrine consider Artesunate with Amodiaquine 100/270mg as alternative
2. 1st trimester pregnancy - Oral quinine and Clindamycin
3. 2nd and 3rd trimester pregnancy continue with Artemether-Lumefantrine

Further management:

1. Use dosage chart
2. Doctors to determine frequency of monitoring
3. Treat hypoglycaemia
4. Check for malnutrition: record Z-score if <5 years. Caution with fluids in malnutrition
5. Doctors to determine maintenance fluids/feeds
6. Do not give bolus iv fluids for shock unless the cause is gastroenteritis
7. If Hb 5 g/dl transfuse 20ml/kg whole blood urgently
8. Treat co-infection if signs present

Fever > 37.5 or history of fever & no obvious cause of infection

Carry out malaria RDT/Blood film

NEGATIVE

IF NO SIGNS OF SEVERE MALARIA DO NOT TREAT AND DISCUSS WITH SENIOR

POSITIVE

Signs of severe malaria

Prostration (unable to walk/sit without support or drink/breastfeed)
 > 2 convulsions in 24 hours
 Altered consciousness
 Blood Sugar < 2.5mmol/L
 Hb < 5.0g/dL (or PVC 15%)
 Shock (compensated or decompensated)
 Increased work of breathing where pneumonia is unlikely

YES

Initiate ARTESUNATE 2.4mg/kg IV/IM at 0,12,24 hours

Patient has had minimum of 3 doses artesunate, resolution of symptoms and tolerating oral medication?

Initiate ARTEMETHER/LUMEFANTRINE (AL) 80/480mg (co-artem 4 tablets) BD for three days

NO

Appendix 3: HIV Inpatient Checklist

Please complete for all patients with a positive HIV test			
Name	Age	Sex	Hospital ID
Address		Contact number	
Team:	ART/HTS code	Occupation:	Ward
Date of Discharge/death:		Outcome of admission: Discharge/death/ DAMA	
To be completed on admission			
→ Send sample for CD4 <input type="checkbox"/> Date requested: _____ Result: _____			
Admission details			
Presenting complaint:			
HIV 1 <input type="checkbox"/> HIV 2 <input type="checkbox"/> HIV 1+2 <input type="checkbox"/>		New diagnosis <input type="checkbox"/> Previously diagnosed <input type="checkbox"/> → if so complete next section	
HIV details and support services			
Date diagnosed: _____		Site of usual care: _____	Date of last clinic attendance: _____
Previous CD4 & date: _____		Previous VL & date: _____	
ART: Current regimen:			
- Adherence (review yellow book): Good <input type="checkbox"/> Intermittent <input type="checkbox"/> Treatment interrupted (defaulter) <input type="checkbox"/> No book <input type="checkbox"/>			
→ Prescribe current ART unless reason to stop <input type="checkbox"/> Reason if not prescribed: _____			
→ Prescribe co-trimoxazole 960mg tabs OD unless high-dose indicated <input type="checkbox"/> Reason if not prescribed: _____			
Support: Family support <input type="checkbox"/> Member of support group <input type="checkbox"/> Destitute <input type="checkbox"/> Self <input type="checkbox"/>			
HIV status of partner: Positive() Negative() Unknown()			
TB status			
Previous TB: Y <input type="checkbox"/> N <input type="checkbox"/> Currently on TB treatment Y <input type="checkbox"/> N <input type="checkbox"/> Start date of TB treatment: _____ Regimen _____			
If not already on TB treatment is the TB symptom screen: Positive <input type="checkbox"/> Negative <input type="checkbox"/> (see above)			
→ Xpert / AFB (circle one) result: Positive <input type="checkbox"/> Negative <input type="checkbox"/> Not done <input type="checkbox"/> Date result available: _____			
CXR required: Y <input type="checkbox"/> N <input type="checkbox"/> Date requested: _____			
- Result: _____		Date result available: _____	
- Outcome: TB diagnosed <input type="checkbox"/> → start TB treatment. Date: _____		Regimen: _____	
TB excluded <input type="checkbox"/> → consider IPT <input type="checkbox"/> and consider other OI <input type="checkbox"/>			
Evaluation for possible opportunistic infections – for further management details consult EM guidance			
Neurological symptoms: Headache <input type="checkbox"/> Weakness Focal <input type="checkbox"/> /General <input type="checkbox"/> Visual problems <input type="checkbox"/> Dysarthria <input type="checkbox"/> Syncope <input type="checkbox"/>			
Signs and symptoms of meningitis? Y <input type="checkbox"/> N <input type="checkbox"/> Focal neurological deficit? Y <input type="checkbox"/> N <input type="checkbox"/> GCS: E V M			
- Result: _____		Date result available: _____	
- Outcome: Presumptive diagnosis of CM <input type="checkbox"/> → start IV Fluconazole 1200mg OD <input type="checkbox"/>			
No presumptive CM <input type="checkbox"/> → start Fluconazole 800mg OD and consider other neurological OI			
General examination			
Skin rash <input type="checkbox"/> Enlarged lymph nodes <input type="checkbox"/> Oral thrush <input type="checkbox"/> Leg swelling <input type="checkbox"/>			
GI signs/symptoms: Vomiting <input type="checkbox"/> Dysphagia <input type="checkbox"/> Abdominal pain <input type="checkbox"/> Diarrhoea <input type="checkbox"/> Jaundice <input type="checkbox"/> Oral candidiasis <input type="checkbox"/>			
Dermatological signs/symptoms: Scabies <input type="checkbox"/> Rash <input type="checkbox"/> KS <input type="checkbox"/> Shingles <input type="checkbox"/> Others(specify): _____			
GU signs/symptoms: Discharge <input type="checkbox"/> Blister/ulcer <input type="checkbox"/> Dysuria <input type="checkbox"/> Others (specify): _____			
ART prescriptions			
Starting ART: Start ART now <input type="checkbox"/> Details of ART regimen: _____		Date started: _____	
- OR Start ART later <input type="checkbox"/> Reason to defer: _____		Target start date: _____ (when starting, then complete)	
Details of ART regimen: _____		Date started: _____	
Continuing ART: Continue regimen <input type="checkbox"/> Substitute within 1 st line regimen <input type="checkbox"/> Start 2 nd line ART <input type="checkbox"/>			
New regimen indication: Treatment failure <input type="checkbox"/> Side effects <input type="checkbox"/> Other: _____		New ART regimen: _____	Date started: _____
Completed by: Name: _____		Signature: _____	Designation: _____ Date: _____

Appendix 4: Clinical frailty scale

Clinical Frailty Scale*



1 Very Fit – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.



2 Well – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.



3 Managing Well – People whose **medical problems are well controlled**, but are **not regularly active** beyond routine walking.



4 Vulnerable – While **not dependent** on others for daily help, often **symptoms limit activities**. A common complaint is being “slowed up”, and/or being tired during the day.



5 Mildly Frail – These people often have **more evident slowing**, and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.



6 Moderately Frail – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.



7 Severely Frail – **Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



8 Very Severely Frail – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



9. Terminally Ill - Approaching the end of life. This category applies to people with a **life expectancy <6 months**, who are **not otherwise evidently frail**.

Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

* 1. Canadian Study on Health & Aging, Revised 2008.

2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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