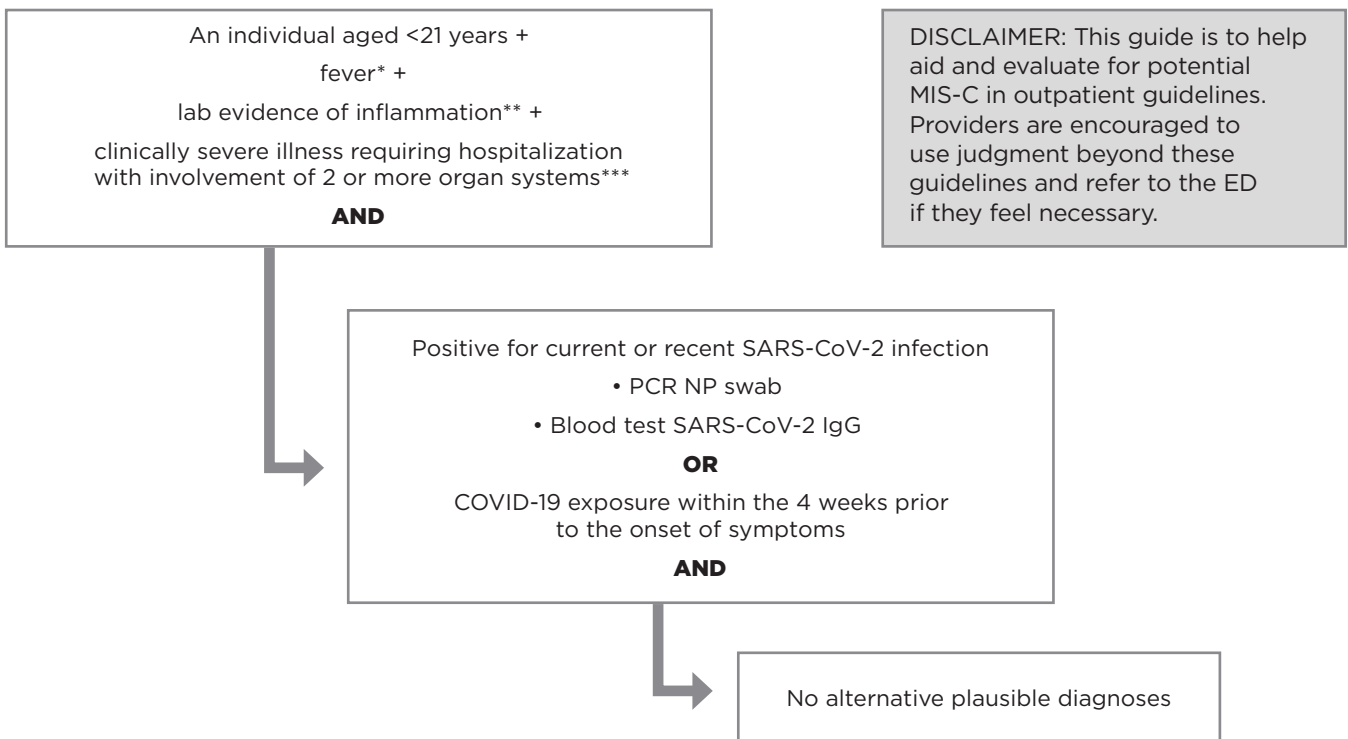


defined by Centers for Disease Control (CDC)

MIS-C

(multisystem inflammatory syndrome in children)

when to consider evaluation for inpatient management



* Fever - 38.0°C or higher for 24 hours, or report of subjective fever for greater than 24 hours.

** One or more of the following: an elevated C-reactive protein (CRP), erythrocyte sedimentation rate (ESR), fibrinogen, procalcitonin, d-dimer, ferritin, lactic acid dehydrogenase (LDH), elevated neutrophils, reduced lymphocytes and low albumin.

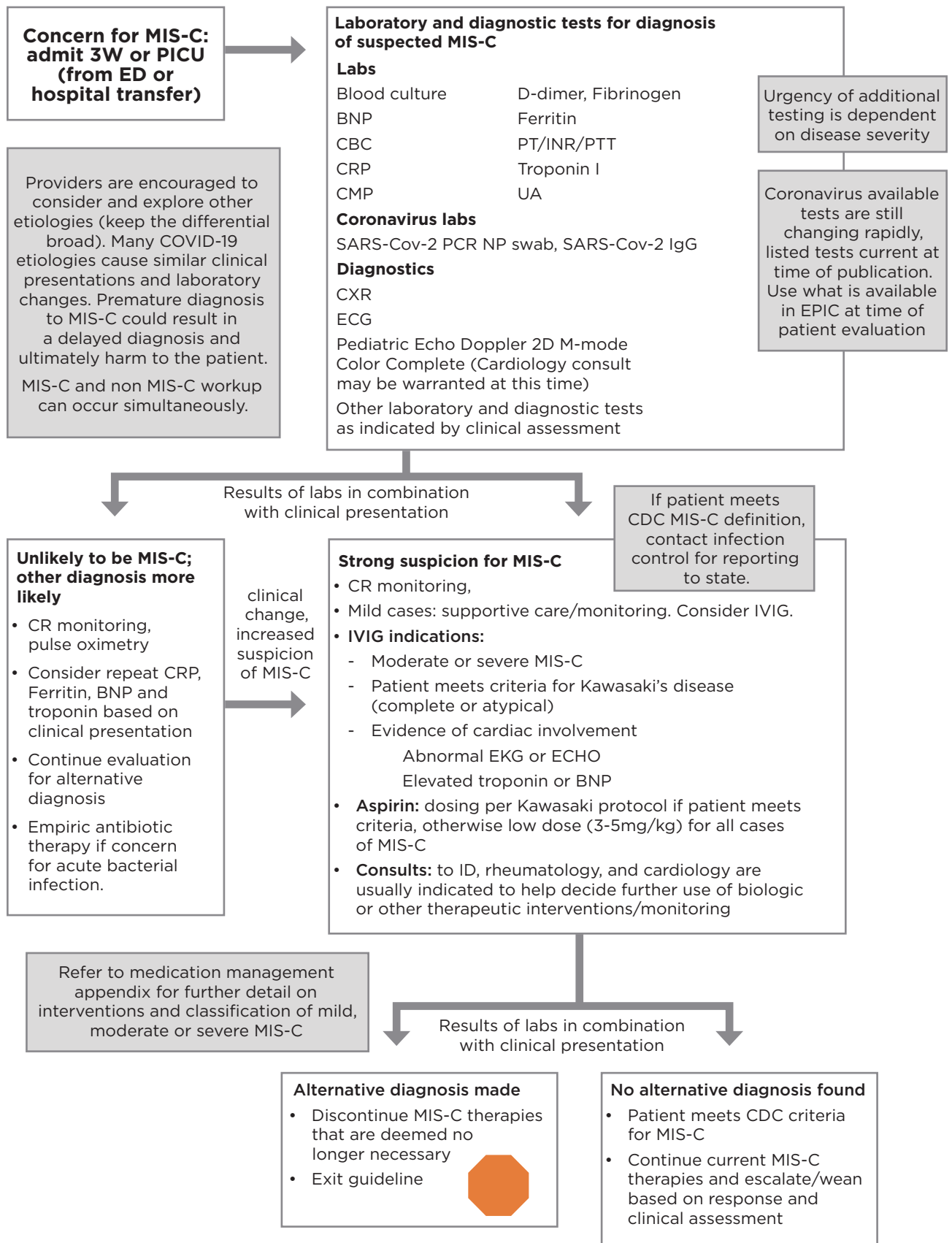
Additional comment:

- Patients meeting criteria for Kawasaki disease should be reported if they also meet CDC definition for MIS-C.

*** Multisystem involvement examples:

- Cardiovascular: shock, increased troponin, elevated BNP, abnormal echocardiogram, arrhythmia
- Respiratory: pneumonia, pulmonary embolism, ARDS
- Renal: AKI, renal failure
- Neurologic: aseptic meningitis, stroke, seizure
- GI: increased LFTS, diarrhea, GI bleed, ileus, vomiting, abdominal pain
- Dermatologic: rash, mucositis, erythroderma

algorithm for evaluation and management of inpatient admitted for ruling out MIS-C



medication management of MIS-C

coronavirus MIS-C severity	medication	dose
Mild MIS-C: admitted to 3W. No vasoactive requirement, minimal/no respiratory support, minimal organ injury	Moderate MIS-C: ICU level care required 0-1 vasopressors, significant supplemental oxygen support, mild or isolated organ injury	Severe MIS-C: ICU level care required. More than 1 vasopressors, non-invasive or invasive ventilator support, moderate or severe organ injury including moderate to severe ventricular dysfunction
all patients	Consider broad spectrum antibiotics pending culture results: ceftriaxone +/- vancomycin. Consider additional anti-microbial dependent on patient presentation. Gastrointestinal prophylaxis with PPI. Continuous CR monitoring. Aspirin 3-5 mg/kg/day (81 - 325 mg per day. Subject to change based off cardiology recommendations/clinical presentation of patient.)	
mild MIS-C	N/A. Consider IVIG on case per case basis. Consider IV methylprednisolone 2mg/kg/day IV divided q6-12 hours.	N/A.
moderate MIS-C	IVIG	2 g/kg (max 100g) IV over 12-16 hours
	Consider methylprednisolone	2mg/kg/day IV divided q 6-12 hours or 10-15mg/kg IV q 24 hours.
	Anakinra* (If refractory to IVIG)	2-10 mg/kg/day (max 100mg per dose) IV/SC
severe MIS-C	IVIG	2 g/kg (max 100g) IV over 12-16 hours
	Anakinra*	Dosing determined by rheumatology
	Consider methylprednisolone	20-30 mg/kg/day (max 1000 mg) for 1-3 days
complete or atypical Kawasaki disease	IVIG 2 g/kg (max 100g) IV over 12-16 hours Aspirin (per cardiology and Kawasaki protocol: high dose/low dose) Additional immunomodulators as needed in conjunction with appropriate consultants	
evidence of cardiac involvement (regardless of severity) • Abnormal ECG, ECHO • Elevated BNP/Troponin	IVIG 2 g/kg (max 100g) IV over 12-16 hours	

*Rheumatology approval prior to
anakinra start to confirm dosing and
indication

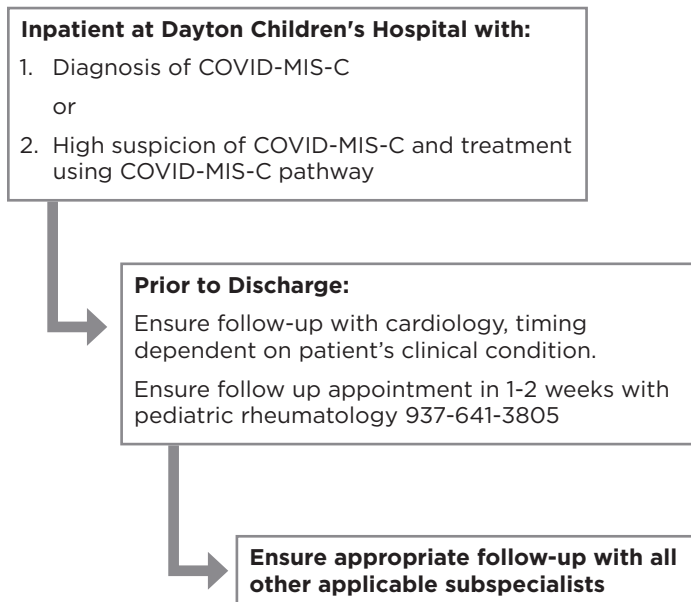
*DISCLAIMER: Medication dosing is suggestive and based on current medical literature. The clinical
presentation may warrant different therapies/doses that deviate from the above guidelines and should be
evaluated on a case by case basis.*

general inpatient management of MIS-C

daily MIS-C care	
monitoring	Daily labs: CBC, CRP, troponin I, BNP, CMP, Ferritin until patient status improved or plateaued ESR, fibrinogen, coagulation studies, d-dimer as needed to monitor inflammation and patient specific indications Other labs and frequency depending on organs involved and severity of illness
	Continuous CR monitoring Initial ECHO and EKG: then as recommended by cardiology or significant change in patient status Repeat CXR as needed based on patient condition

inpatient discharge of confirmed MIS-C or strong suspicion of MIS-C

Discharge medications for MIS-C	Very dependent on hospital course
Rheumatology Follow up (required)	1-2 weeks after discharge (Rheumatology office: 937-641-3805)
Cardiology Follow up (required)	Timing dependent on patients' clinical presentation
Other Follow-up	Schedule follow up with other subspecialties as deemed necessary.



bibliography

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2. Capone CA, Subramony A, Sweberg T, Schneider J, Shah S, Rubin L, et al. Characteristics, Cardiac involvement, and Outcomes of Multisystem Inflammatory Disease of Childhood (MIS-C) Associated with SARS-CoV-2 Infection. 2020.
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5. Belhadjer Z, Méot M, Bajolle F, et al.: Acute heart failure in multisystem inflammatory syndrome in children (MIS-C) in the context of global SARS-CoV-2 pandemic [IN PRINT]. *Circulation.* 2020, 10.1161/CIRCULATIONAHA.120.048360
6. <https://www.cdc.gov/mis-c/hcp/>