



INCLUSION

SCD with VOE or Dactylitis with or without fever

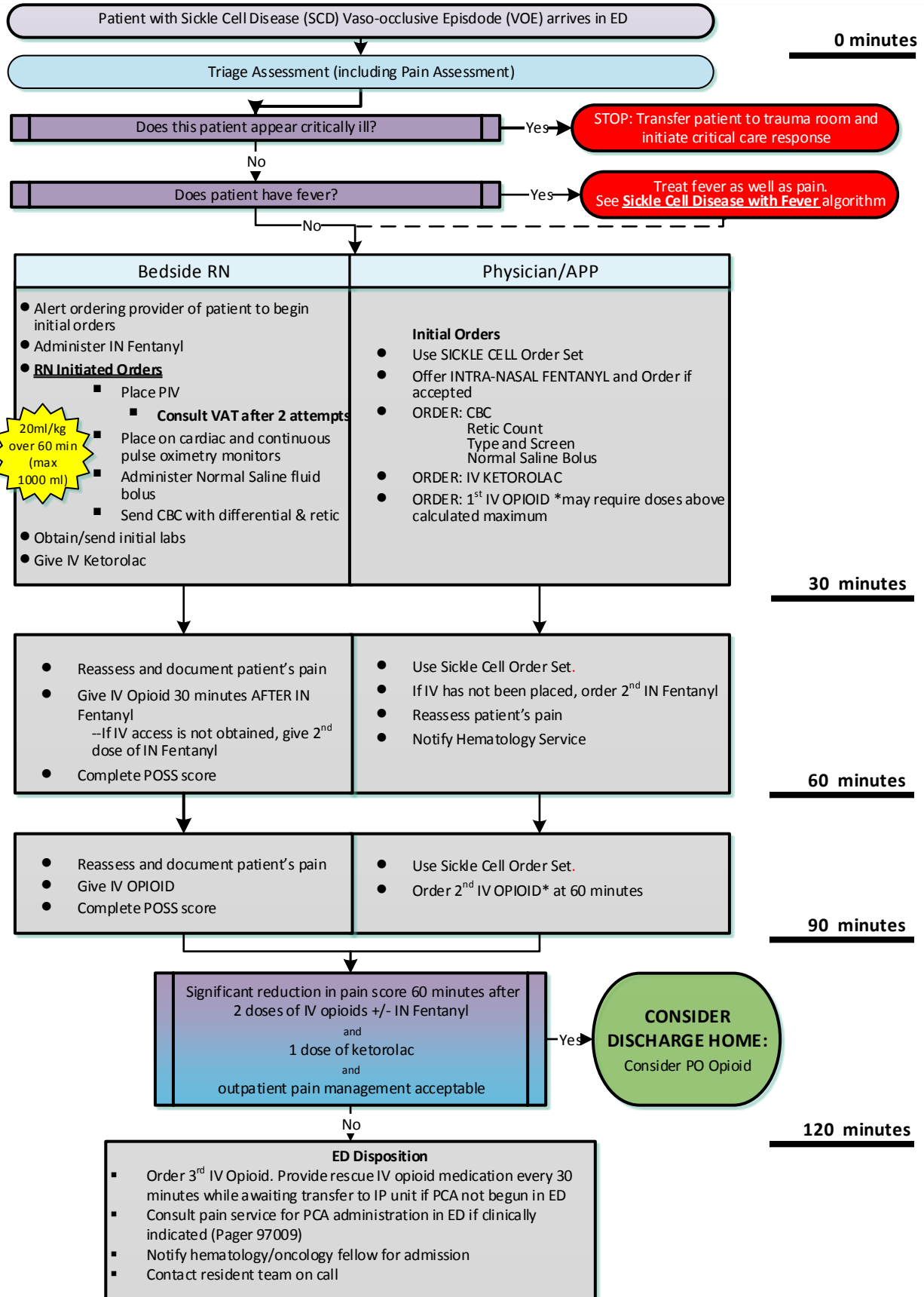
EXCLUSION

- Documentation or suspicion for Acute Chest Syndrome
- Indications for higher level of care (ICU)
- Documentation or suspicion for serious bacterial infection, i.e., sepsis, osteomyelitis, pyelonephritis, cholecystitis, etc.
- Surgery this admission
- Stroke

PAIN ACTION PLAN

If the patient has a pain action plan, it should be located under "notes" section under "action plan"

Go to the [evidence](#) for this clinical care guideline



Sickle Cell Disease with Fever in the Emergency Department



INCLUSION
All patients with Sickle Cell Disease AND fever >38.0C +/- pain

EXCLUSION
Patients with Sickle Cell Disease without fever.

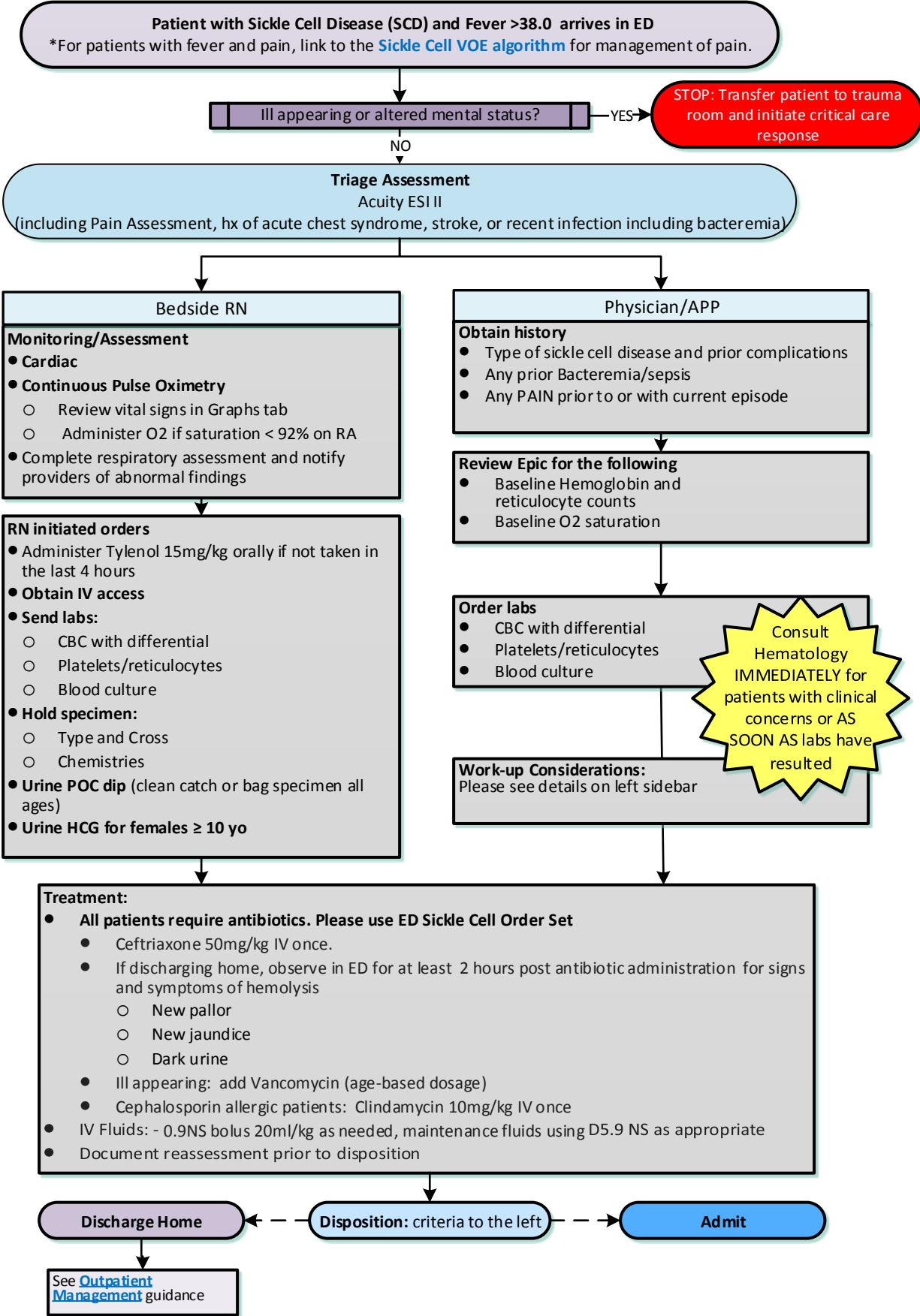
[Sickle Cell VOE algorithm](#)

DISPOSITION
[Criteria for Absolute Admission](#)
[Criteria for Considering Admission](#)
[Criteria for Considering Discharge](#)

Work-up Considerations:

- CXR (PA & Lateral) in patients with respiratory distress, cough, tachypnea, hypoxia, or focal findings on exam
- VBG/iSTAT for RA O2 saturation < 90% OR respiratory distress
- BMP or CMP in cases of clinical dehydration or abdominal pain
- Urinalysis and/or culture based on results of POC/urinalysis, age, and symptoms of patient
- **Type and Crossmatch:** after discussion with hematology provider

Go to the [evidence](#)



This clinical care guideline is meant as a guide for the healthcare provider, does not establish a standard of care, and is not a substitute for medical judgment which should be applied based upon the individual circumstances and clinical condition of the patient.



Disposition for Sickle Cell Disease with Fever

CRITERIA FOR ABSOLUTE ADMISSION FOR SICKLE CELL DISEASE WITH FEVER

- Patients < 18 months of age
- Chest pain
- Neurological Symptoms
 - (see Stroke algorithm in Weblinks)
- Temperature $\geq 40^{\circ}\text{C}$ documented
- Hypotension
- Persistent Tachycardia
- Tachypnea
- Hypoxia (O₂ saturation $\text{Pl} < 90\%$ on RA or lower than baseline if patient has known hypoxia)
- Lab findings
 - $> 25\%$ decrease from baseline hemoglobin
 - WBC < 5000 or $> 30,000$
 - Platelet count $\leq 100,000$
- Pulmonary infiltrate on CXR
- Toxic appearance
- Focal infection of bone, soft tissue or CSF
- Severe Pain
- Previous sepsis positive blood culture in past 90 days

CRITERIA FOR CONSIDERING ADMISSION

- Previous sepsis (**positive blood culture** in past 3-24 months)
- Priapism requiring treatment
- Compliance concerns

CRITERIA FOR CONSIDERING DISCHARGE

Do not meet admission considerations above AND

- Non-toxic appearance
- ED observation period of 3 hours
- Parents, patient and Hematology fellow agree to outpatient management plan

Outpatient management:

- Antipyretics (Tylenol) may be given as needed
- The family should call the hematology nurse (weekdays) or the hematologist on call (weekends) the next morning report on child's condition and plan any further management.
- Discharge instructions should indicate: **Follow-up by telephone or repeat visit to the hematology clinic within 24 hours (ALL patients)**

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[Evidence](#)



Evidence

US Department of Health and Human Services. [Evidence-based management of sickle cell disease: expert panel report 2014.](#)

Fein DM, Avner JR, Scharbach K, et al. [Internasal fentanyl for initial treatment of vaso-occlusive crisis in sickle cell disease.](#) *Pediatr Blood Cancer.* 2017. Jun; 64(6). Doi: 10.1002/pbc.26332. Epub 2016 Nov 10.

Northrop, Michael S. MD; Agarwal, Hemant S. MBBS, FAAP Ceftriaxone-induced Hemolytic Anemia, *Journal of Pediatric Hematology/Oncology:* January 2015 - Volume 37 - Issue 1 - p e63-e66 doi: 10.1097/MPH.000000000000181

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Please contact jcorboy@luriechildrens.org to request changes or updates to this algorithm and supplement.

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