

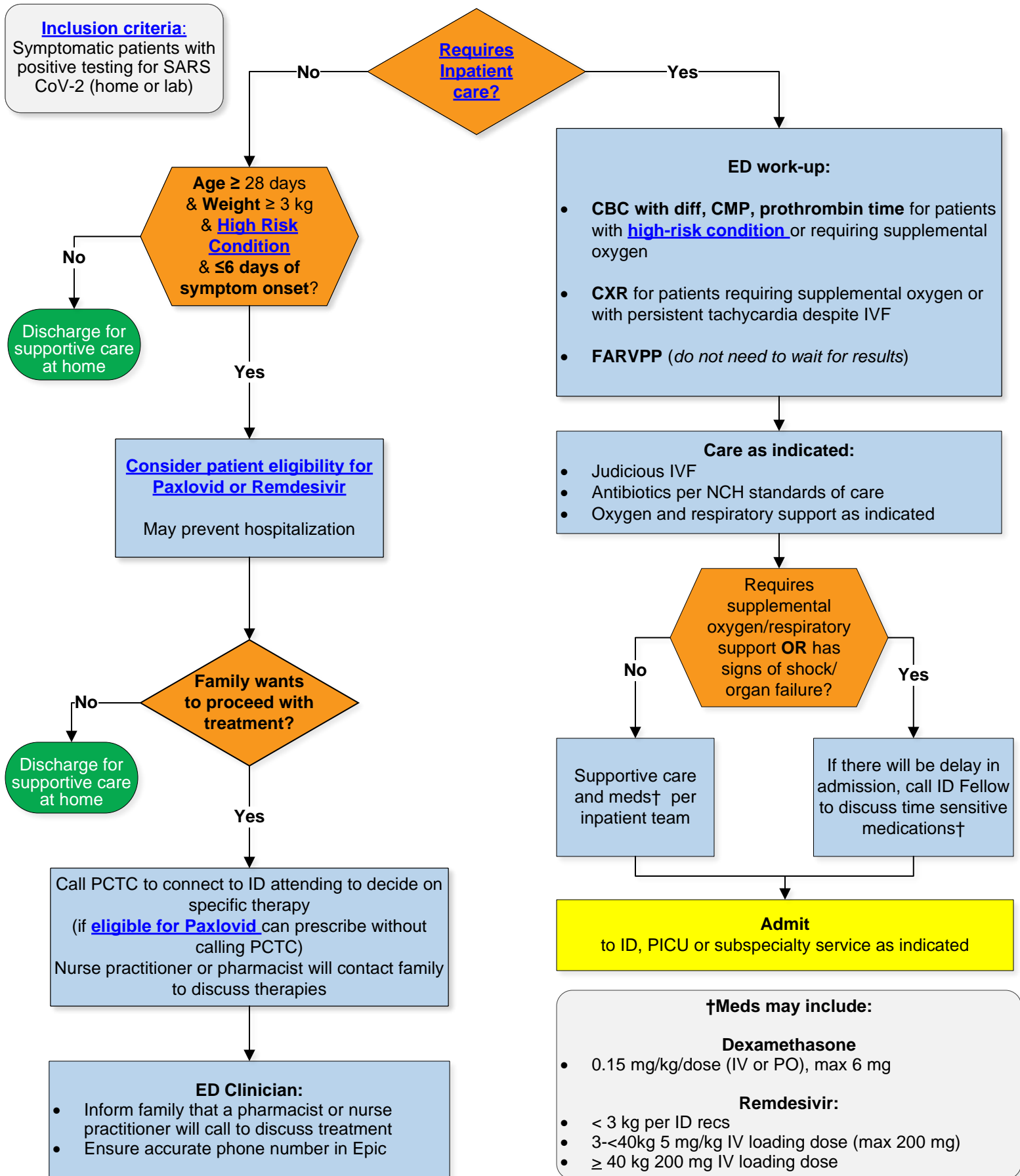


**NATIONWIDE
CHILDREN'S**

When your child needs a hospital, everything matters.

Acute COVID 19 Management Emergency Department

**Center for
Clinical Excellence**



Inclusion & Exclusion Criteria

Inclusion criteria:

- Symptomatic patients with positive testing for SARS CoV-2 (home or lab)

Exclusion Criteria:

- Asymptomatic patients with SARS CoV-2
- Patients with illness not related to SARS CoV-2
- Neonates
- Patients with concern for MIS-C

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High Risk Condition

Strong Association with Progression to Severe COVID-19 (particularly if never vaccinated for COVID-19):

- Moderate or severe immunocompromise (see definitions below)^a
- Severe congenital or acquired heart disease (see definitions below)^b
- Obesity (BMI ≥ 30 kg/m² or $\geq 95^{\text{th}}$ percentile for age – see table below)^c
- Medical complexity with dependence on respiratory technology
- Severe neurologic, genetic, metabolic, or other disability that results in impaired airway clearance or limitations in self-care or activities of daily living
- Severe asthma or other severe chronic lung disease requiring ≥ 2 inhaled or ≥ 1 systemic medications daily

Moderate or Inconsistent Association with Progression to Severe COVID-19: consider treatment on case-by-case basis^d

- Sickle cell disease
- Diabetes (poorly controlled)
- Prematurity and age ≤ 2 years

Footnotes:

^aModerate/Severe Immunocompromise:

- Receiving active systemic anti-cancer treatment for hematologic malignancies or solid tumors resulting in significant immunosuppression or unlikely to have responded to COVID-19 vaccination
- Solid organ transplant within the past 3 months or lung transplant recipient at any time, receiving immunosuppressive therapy
- Bone marrow transplant or chimeric antigen receptor T cell (CART-cell) therapy recipient within the past 12 months or within 2 years and receiving immunosuppressive therapies
- Primary immunodeficiency disorder with profound T or B cell dysfunction
- T-cell depleting therapy with CD4 count < 300 cells/mm³ or, for children, $< 15\%$
- B-cell depleting therapy within the past 6 months and no evidence of B cell recovery
- Systemic corticosteroids with prednisone equivalent of ≥ 20 mg/day or ≥ 2 mg/kg/day for ≥ 14 days
- Advanced or untreated HIV

^bSevere Heart Disease:

- Uncorrected or palliated cyanotic CHD
- Hemodynamically significant CHD
- One pumping chamber
- Heart failure
- Significant pulmonary hypertension requiring vasodilatory therapy

^dConsider factors such as severity of underlying condition, presence of additional chronic conditions potentially associated with severe COVID-19 (i.e., overweight; non-severe cardiac, pulmonary, neurologic, or metabolic disease; immunosuppression not meeting the definition of moderate/severe), and COVID-19 vaccination status when assessing individual benefit vs risk of treatment.

^cObesity Definitions by BMI:

Age	BMI: weight in kg/(height in m) ²	
	Male	Female
2	19.3	19.1
3	18.2	18.3
4	17.8	18
5	17.9	19.3
6	18.4	18.8
7	19.2	19.7
8	20.1	20.7
9	21.1	21.8
10	22.2	23
11	23.2	24.1
12	24.2	25.3
13	25.2	26.3
14	26	27.3
15	26.8	28.1
16	27.6	28.9
17	28.3	29.6
18	29	30
19	29.7	30
20+	30	30

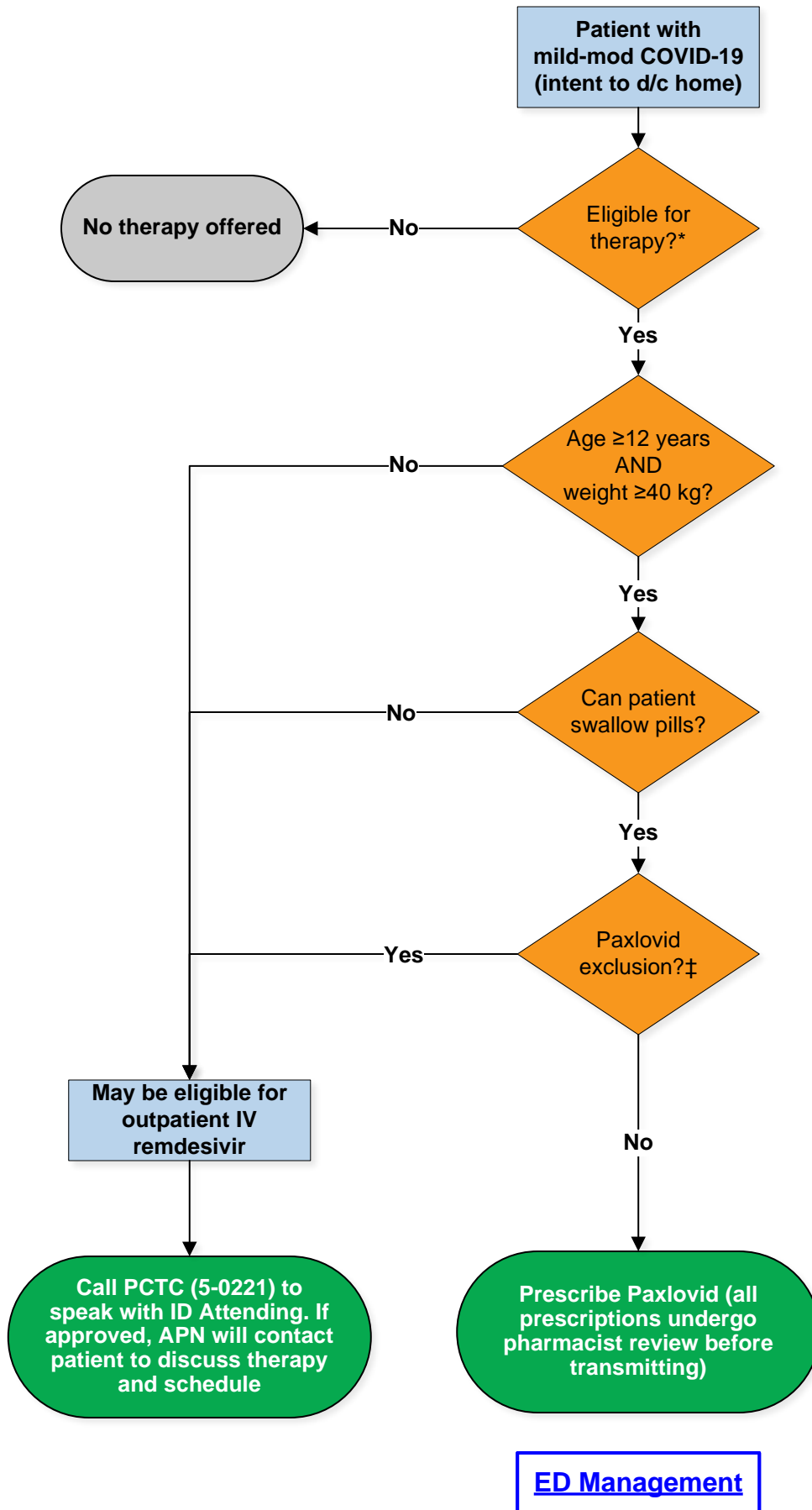
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Indications for Admission

- Lower resp sxs & abnormal CXR & high risk condition
- Oxygen requirement
- Dyspnea
- Tachycardia
- Sepsis, organ failure
- Altered mental status

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Outpatient Treatment Management



*Eligibility Criteria

- ≥28 days old
- ≥3 kg
- Mild-mod COVID-19 symptoms (starting ≤6 days ago)
- Positive viral test (lab or home test)
- [High risk condition](#)

3 pills BID x 5d
Pills CANNOT be chewed, broken, or crushed

‡Paxlovid exclusions:

- Symptoms started >5 days ago
- Transplant & currently on immunosuppressive therapy
- Pregnancy
- Malabsorption
- Multiple potential drug interactions – please discuss with ED Pharmacist

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Outpatient COVID Therapies

Outpatient treatments for mild-moderate COVID-19 are available for patients who meet the following general criteria:

- An underlying risk factor for progression to severe disease, available on [Anchor](#) or [NCH website](#)
- Symptoms of COVID-19 and a positive viral test for SARS-CoV-2 (including home tests)
- Not hospitalized due to COVID-19, requiring oxygen therapy due to COVID-19, or requiring an increase in oxygen flow rate due to COVID-19 (for those on chronic oxygen therapy)

Drug Name	Minimum Age	Minimum Weight	Additional Criteria	Contraindication/Precaution	How to Access†
Paxlovid (nirmatrelvir & ritonavir)	12 years	40 kg	<ul style="list-style-type: none">• Able to start treatment within <u>5</u> days of symptom onset• Able to swallow pills whole	Contraindications: <ul style="list-style-type: none">• Transplant & currently on immunosuppressive therapy• Pregnancy• Malabsorption• Many drug-drug interactions¶	Call Physician Direct Connect (614-355-0221) and speak to an ID physician or prescribe to retail pharmacy or NCH Blue pharmacy‡
IV Remdesivir (3-day course)	28 days	3 kg	<ul style="list-style-type: none">• Able to start treatment within <u>7</u> days of symptom onset	Precautions: <ul style="list-style-type: none">• Transaminase elevation• PT prolongation	Call Physician Direct Connect (614-355-0221) and speak to an ID physician

†For NCH inpatients with COVID-19 but NOT hospitalized because of COVID-19, and who are otherwise eligible for outpatient therapy, contact the ID consult team. If treatment recommended, bebtelovimab and remdesivir can be ordered in Epic; for Paxlovid, work with clinical pharmacist to complete review of potential drug-drug interactions and facilitate ordering.

¶Review contraindications before prescribing. If obtained through ID via Physician Direct Connect, pharmacy review occurs routinely prior to prescribing.

‡Clinicians may prescribe Paxlovid to [retail pharmacies](#) or NCH Blue pharmacy without speaking to NCH ID. All prescriptions written in NCH Epic will undergo pharmacist review prior to transmission to the pharmacy.

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Quality Metrics

Goal:

- Identify patients with COVID-19 who are at high risk for severe disease and provide optimal evaluation and treatment.

Process Measures:

- Pathway visualization
- Order set utilization
- Paxlovid prescription rate for high-risk patients
- Pharmacist utilization of Paxlovid dot phrase

Outcome measures:

- ED return visits for respiratory symptoms within 72 hours
- Treatment with antibiotics

Balancing measure:

- ED LOS

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Pathway Team & Process

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Origination Date: *October, 2021*

Last Revision: *January, 2024*

Next Revision Date: *January, 2027*

Clinical Pathway Development

This clinical pathway was developed using the process described in the NCH Clinical Pathway Development Manual Version 6, 2022. Clinical Pathways at Nationwide Children's Hospital (NCH) are standards which provide general guidance to clinicians. Patient choice, clinician judgment, and other relevant factors in diagnosing and treating patients remain central to the selection of diagnostic tests and therapy. The ordering provider assumes all risks associated with care decisions. NCH assumes no responsibility for any adverse consequences, errors, or omissions that may arise from the use or reliance on these guidelines. NCH's clinical pathways are reviewed periodically for consistency with new evidence; however, new developments may not be represented, and NCH makes no guarantees, representations, or warranties with respect to the information provided in this clinical pathway.

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