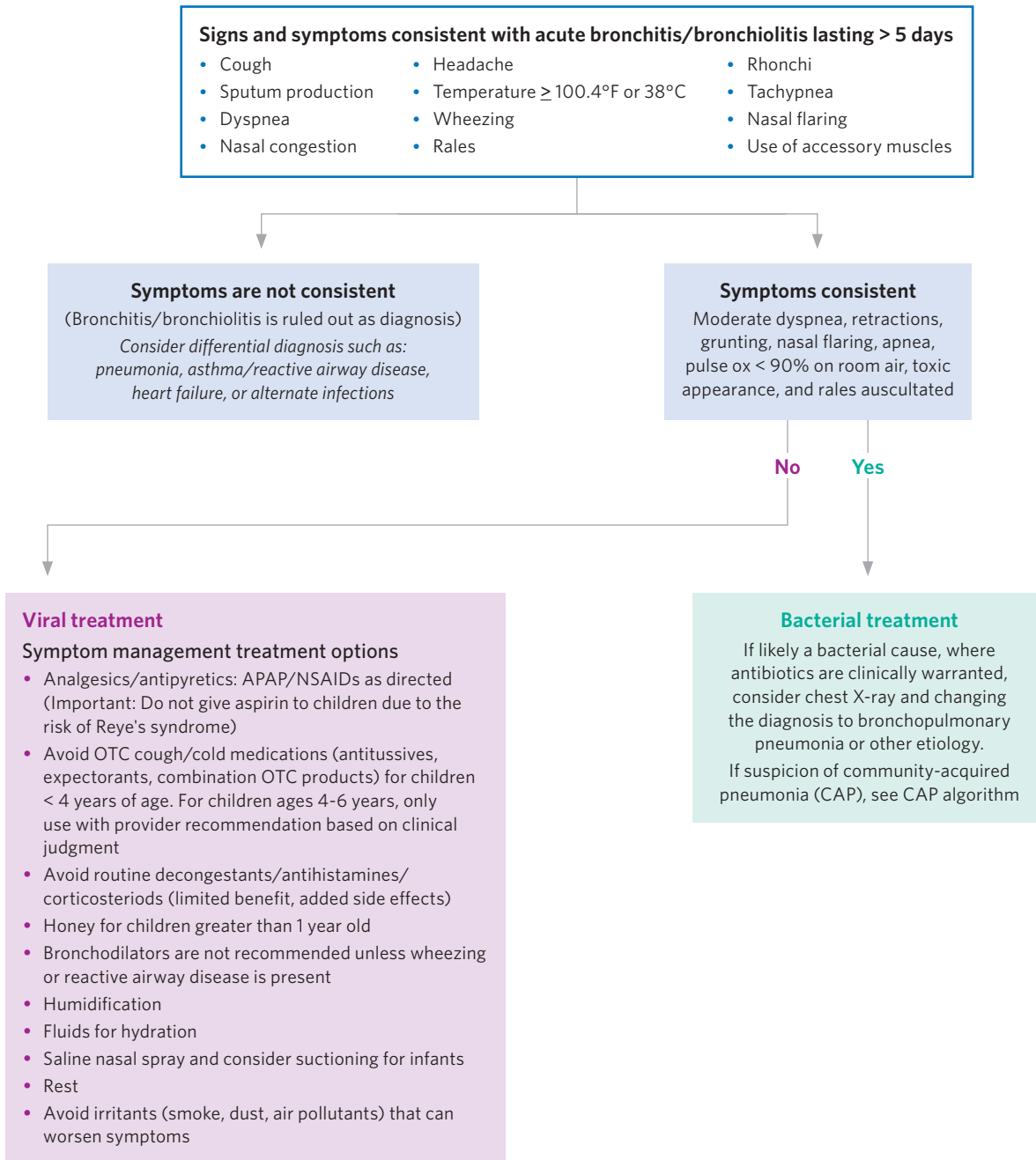


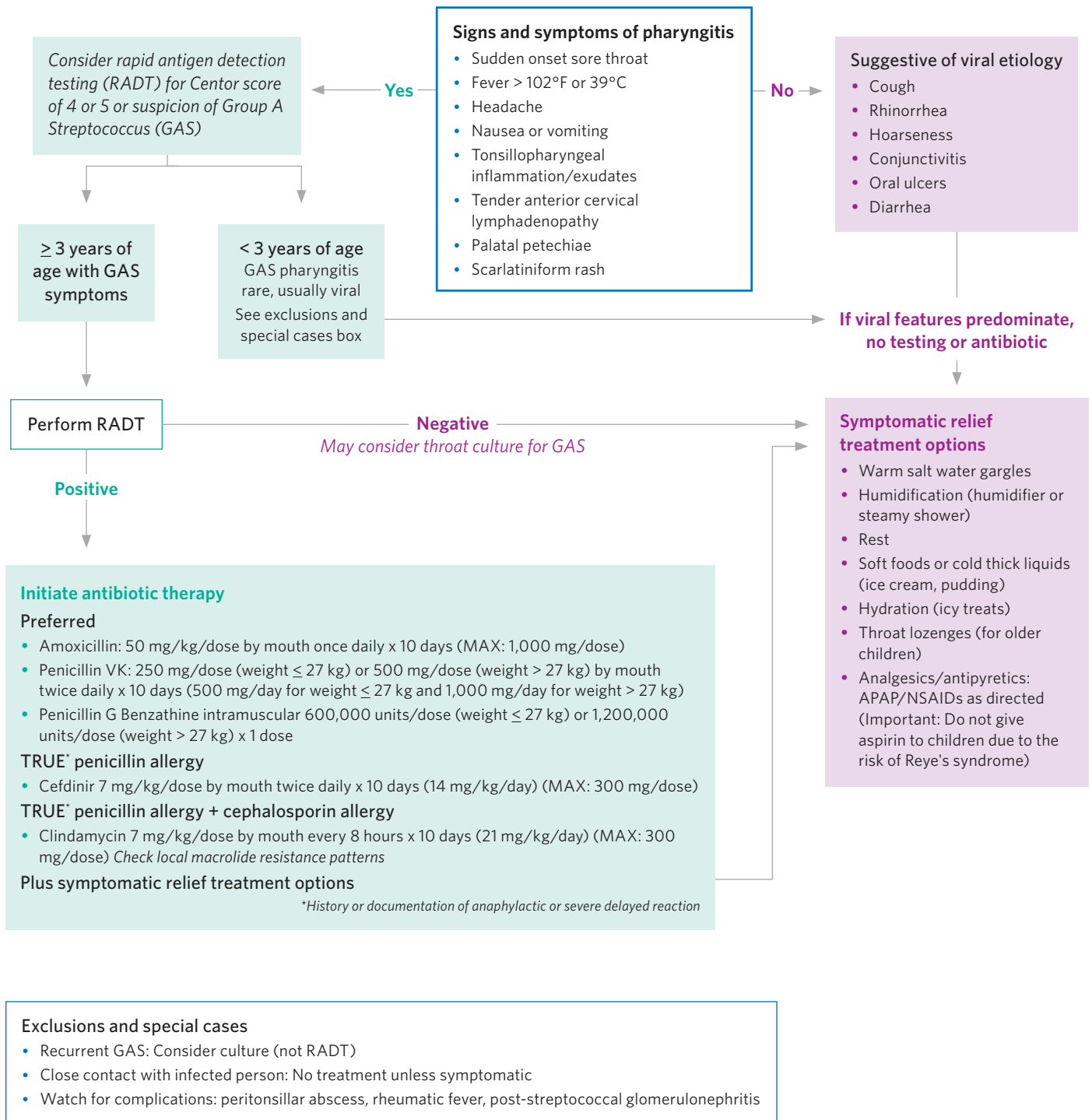
## Acute bronchitis (ages 24 months to 17 years) and bronchiolitis (ages 1 month to 23 months) algorithm for pediatric patients in outpatient setting



### Strategies to reduce antibiotic use for acute bronchitis/bronchiolitis

1. Use delayed prescription strategies
2. Discuss the expected course of illness and cough duration.
3. Explain that the illness is typically caused by a virus (90%) and not bacteria.
4. Explain that antibiotics do not significantly shorten illness duration and are associated with adverse effects and antibiotic resistance.

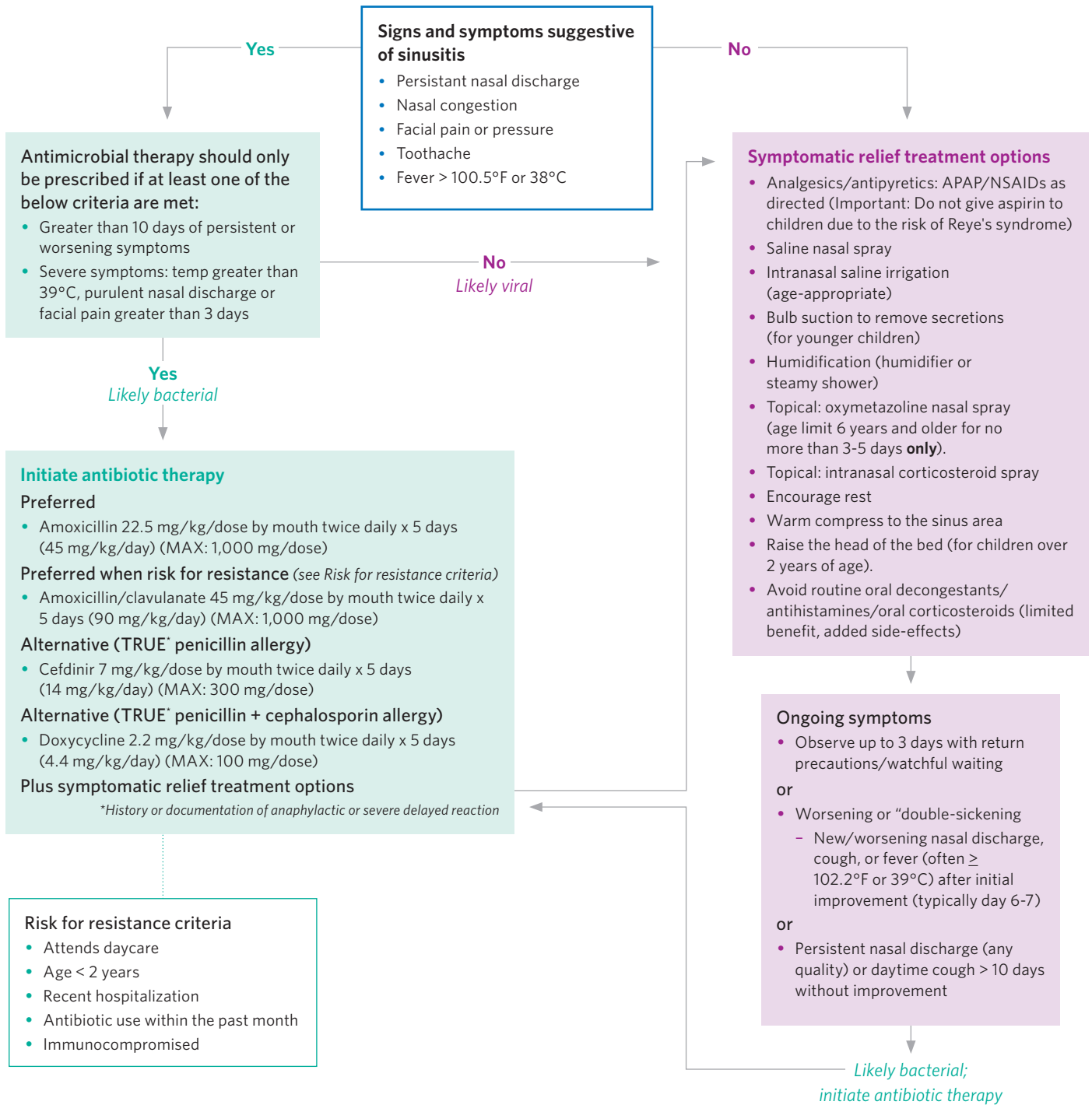
## Acute pharyngitis algorithm for pediatric patients in outpatient setting (ages 6 months to 17 years)



### Strategies to reduce antibiotics use for acute pharyngitis

1. Discuss the expected length of symptoms without antibiotics
2. Explain it is typically caused by a virus
3. Explain that antibiotics do not significantly shorten illness duration and are associated with adverse side effects and antibiotic resistance

## Acute sinusitis algorithm for pediatric patients in outpatient setting (ages 6 months to 17 years)



### Strategies to reduce antibiotics use for acute sinusitis

1. Use delayed prescribing strategies
2. Discuss the expected length of symptoms without antibiotics
3. Explain it is typically caused by a virus
4. Explain that antibiotics do not significantly shorten illness duration and are associated with adverse side effects and antibiotic resistance

# Acute otitis media algorithm for pediatric patients in outpatient setting (ages 6 months to 17 years)

## Exclusion criteria

- Children < 2 months of age, consider sepsis evaluation
- Immunodeficiencies
- Sensory deficits
- Craniofacial abnormalities (i.e. Down syndrome, cleft palate)
- PE tubes
- Neurologic abnormalities

Do not use this guideline for excluded groups. Individualized patient evaluation needed.

## Signs and symptoms suggestive of otitis media

- Ear pain (otalgia)
- Irritability
- Tugging at ear
- Poor sleep/eating

## Assess risk factors for acute otitis media (AOM)

- < 2 years of age
- Smoke exposure
- Daycare
- Pacifier use
- Bottle propping
- No breastfeeding or sub-optimal breastfeeding
- Unimmunized or under-immunized
- Allergies
- Family history of recurrent AOM
- Immunodeficiency
- Craniofacial abnormalities

## Diagnostic criteria for AOM

- Moderate/severe tympanic membrane bulging or new otorrhea
- or
- Mild tympanic membrane bulging and recent ear pain or intense erythema

## Antimicrobial therapy should only be prescribed if at least one of the below criteria are met

- Age < 6 months, unilateral/bilateral, non-severe AOM without otorrhea
- Age 6 months to 2 years, bilateral, non-severe AOM without otorrhea
- All ages, unilateral or bilateral, severe AOM with or without otorrhea

Yes

## Initiate antibiotic therapy

### Preferred

- Amoxicillin 45 mg/kg/dose by mouth twice daily x 5 days (duration x 10 days if < 2 years of age) (90 mg/kg/day) (MAX: 1,000 mg/dose)

### Preferred when risk for resistance (see Risk for resistance criteria)

- Amoxicillin/clavulanate 45 mg/kg/dose by mouth twice daily x 5 days (duration x 10 days if < 2 years of age) (90 mg/kg/day) (MAX: 1,000 mg/dose)

### Alternative (TRUE\* penicillin allergy)

- Cefdinir 7 mg/kg/dose by mouth twice daily x 5 days (duration x 10 days if < 2 years of age) (14 mg/kg/day) (MAX: 300 mg/dose)

### Alternative (TRUE\* penicillin + cephalosporin allergy)

- Azithromycin 10 mg/kg/dose by mouth once daily x 3 days (MAX: 500 mg)

### Plus symptomatic relief treatment options

\*History or documentation of anaphylactic or severe delayed reaction

## Risk for resistance criteria

- Amoxicillin within prior 30 days
- Concomitant purulent conjunctivitis
- Previously failed amoxicillin

## Strategies to reduce antibiotics use for AOM

1. Use delayed prescribing strategies
2. Discuss the expected length of symptoms without antibiotics
3. Explain it is typically caused by a virus
4. Explain that antibiotics do not significantly shorten illness duration and are associated with adverse side effects and antibiotic resistance

Initiate watchful waiting for 48 to 72 hours with symptom management treatment and consider delayed prescribing

## Symptomatic relief treatment options

- Analgesics/antipyretics: APAP/NSAIDs as directed (Important: Do not give aspirin to children due to the risk of Reye's syndrome)
- Warm compress placed on the ear
- Elevate the head of the bed (for children older than 2 years of age)
- Over-the-counter pain relief drops for ears (avoid with ruptured eardrum)

If symptoms fail to improve in 48-72 hours, fill the delayed prescribing prescription

Follow-up if symptoms worsen or fail to improve in 48-72 hours during watchful waiting

## Reassessment plan

If observing without antibiotics: ensure follow-up in 48-72 hours and provide return precautions (worsening symptoms, persistent fever  $\geq 100.4^{\circ}\text{F}$  or  $38^{\circ}\text{C}$ )

# Community-acquired pneumonia algorithm for pediatric patients in outpatient setting

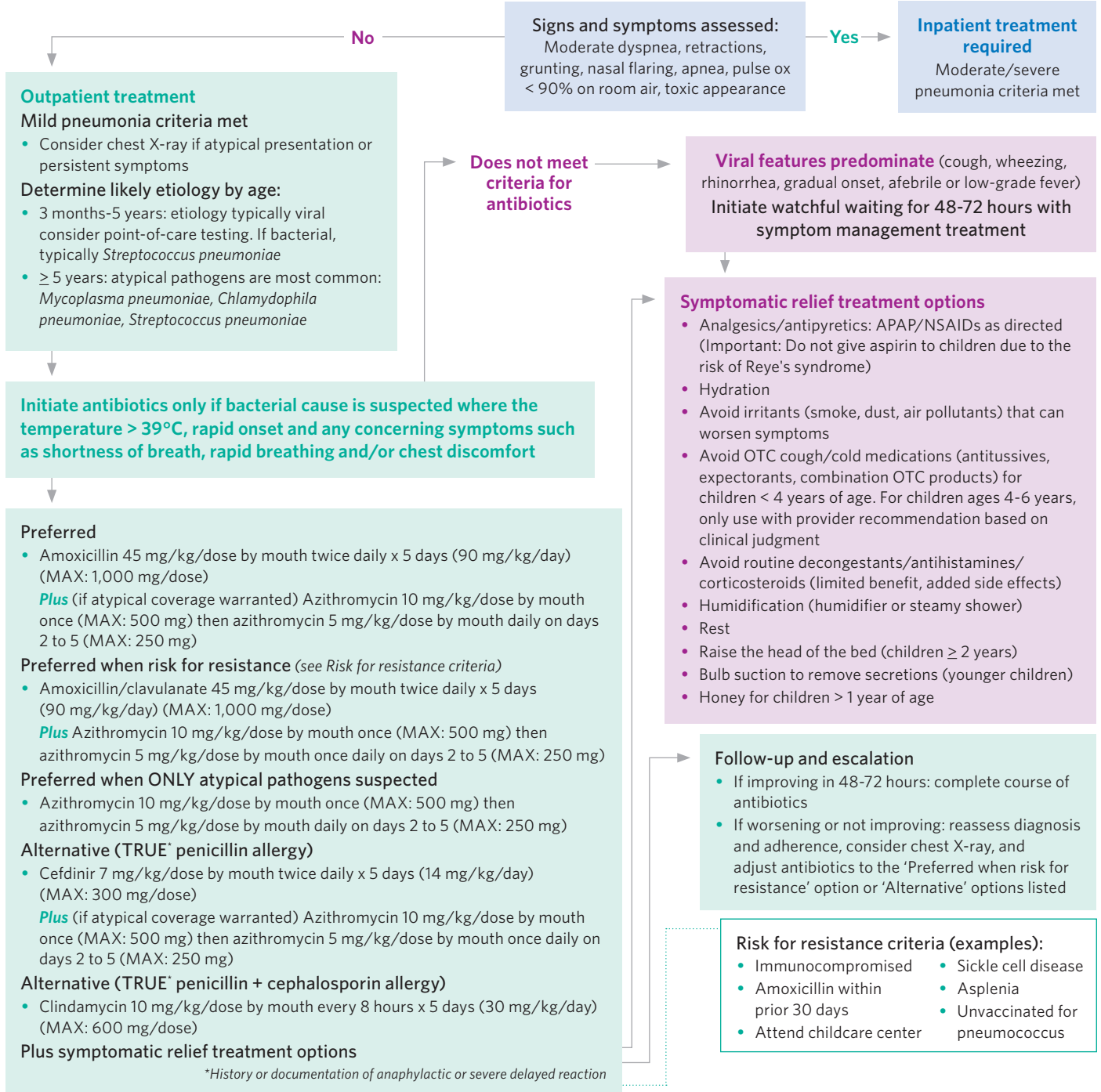
(ages 6 months to 17 years)

## Exclusion criteria

- Cystic fibrosis, other chronic lung disease (except asthma)
- Immunodeficiency or immunosuppressive therapy
- Tracheostomy
- Patients at risk for aspiration pneumonia
- Hospital or institutional-acquired pneumonia

## Signs and symptoms suggestive of community-acquired pneumonia

- |                        |                           |   |
|------------------------|---------------------------|---|
| • Fever                | • Crackles                | <b>Danger signs:</b>                        |
| • Cough                | • Decreased breath sounds |   |
| • Tachypnea            | • Nasal flaring           |   |
| • Difficulty breathing | • Retractions             | • Oxygen saturation < 90% on room air       |
| • Dyspnea              |                           | • Moderate to severe respiratory distress   |
|                        |                           | • Dehydration                               |
|                        |                           | • Toxic appearance or altered mental status |



1. Bradley JS, et al. Pediatric Infectious Diseases Society and the Infectious Diseases Society of America. The management of community-acquired pneumonia in infants and children older than 3 months of age: clinical practice guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America. Clin Infect Dis. 2011 Oct;53(7):e25-76. 2. Cilloniz C, et al. Antimicrobial resistance among Streptococcus pneumoniae. Antimicrobial Resistance in the 21st Century. 2018;13-38. © Ascension 2025. All rights reserved. 639225