Clinical Pathways Program

**Pathway: Bronchitis, Acute Uncomplicated - Adult, Outpatient**

Updated: 10/13/2021

**Clinical algorithm:**

1. **Patient schedules visit** (virtual, in-person, or walk-in)
   - **Patient roomed**

   **Clinician completes patient assessment:**
   - Compatible clinical syndrome in patient without COPD, usually characterized by acute onset but persistent cough:
     - Typically lasting approximately 5 days to 3 weeks
     - With or without sputum production
     - Often associated with current or recent URI
     - May be accompanied by mild dyspnea or wheeze

2. **Suspicion for other cause of the patient’s symptoms** (eg. heart failure, GERD, postnatal drop, ACE inhibitor use)
   - **Test for COVID-19,** continue evaluation and advise isolation while awaiting results

3. **Concern for pneumonia based on any following:**
   - Temperature > 100.4 °F/38.0 °C
   - Pulse > 100 bpm
   - Respiratory rate > 22 bpm
   - Hypoxia (O2 saturation < 95%)
   - Signs of consolidation on chest examination (eg. rales, egophony, tactile fremitus)
   - Altered mental status in patients >75 years

4. **If no infection, patient can be diagnosed with Acute Uncomplicated Bronchitis**
   - **Activate SH BRONCHITIS EPIC SmartSet**
   - **DO NOT PRESCRIBE ANTIBIOTICS**

5. **Provide Patient Education:** ACUTE BRONCHITIS ADULT (multiple languages)
   - **Prescribe symptomatic treatment**

   **If positive, treat as appropriate**

   **If negative,** continue evaluation and advise isolation while awaiting results

   **Other point of care testing to consider:**
   - Flu
   - Strep throat

   **Concern for infection with a specific pathogen that would change management** (eg. Pertussis, influenza)

   **Concern for other cause of the patient’s symptoms**

   **If positive,** treat as appropriate
Clinical pathway summary

CLINICAL PATHWAY NAME: Acute Uncomplicated Bronchitis in Adults

PATIENT POPULATION AND DIAGNOSIS:
- Adults (≥18YO) with Bronchitis diagnosis
- Primary Care
- Urgent Care
- Regional Hospital Clinics (Joint Commission Requirement)

APPLICABLE TO: All SH primary care locations

BRIEF DESCRIPTION:
- Antibiotic treatment for acute uncomplicated bronchitis is generally not indicated
- The main therapeutic considerations if concerns for CAP or influenza in which case appropriate testing or treatment would be indicated
- The exclusionary criteria for treatment for acute uncomplicated bronchitis would be COPD/emphysema, interstitial lung disease, common variable immune deficiency, other immune deficiencies (primary or secondary to medication use), CF, bronchiectasis, pulmonary fibrosis
- Antibiotic prescribing from telephone encounters would not be appropriate

OVERSIGHT TEAM LEADER(S): Dr. Arashdeep Litt, Dr. Rosey Olivero, Sara Ogrin, and Derek VanderHorst

OWNING EXPERT IMPROVEMENT TEAM (EIT): Adult Bronchitis

MANAGING CLINICAL PRACTICE COUNCIL (CPC): Primary Health

CPC APPROVAL DATE: September 23, 2021

OTHER TEAM(S) IMPACTED: Pharmacy

OPTIMIZED EPIC ELEMENTS:
1. Updated BPA (encounter based):
   - Triggers on add diagnosis: If the provider puts in an order for an antibiotic, signs it, and THEN adds a diagnosis of acute bronchitis the BPA will fire.
   - Triggers on add antibiotic: If the provider puts in a diagnosis of acute bronchitis and THEN places the order and signs it, the BPA will fire.
   - If the BPA fires based on one of the above, it will not fire for the other (in other words providers will not see it twice).
Clinical pathways clinical approach

TREATMENT AND MANAGEMENT:

For most patients with acute bronchitis, symptoms are self-limited, resolving in about one to three weeks. Reassurance and symptom control are the cornerstones of care. Antibiotics are not recommended for routine use. Acute bronchitis occurs in the absence of chronic obstructive pulmonary disease (COPD). Symptoms of acute bronchitis that occur in patients with COPD typically indicate an acute exacerbation of COPD, which is managed differently.

Patient education: Provide “Acute Bronchitis Adult” patient handout in appropriate language. Have a discussion on the expected course of illness and treatment plan with all patients. Reassure patients that acute bronchitis is a self-limited illness that typically resolves in one to three weeks without specific therapy can help improve patient satisfaction and reduce inappropriate antibiotic use.

Symptom management:
- Over the counter medications with Guaifenesin or Dextromethorphan
- Nonpharmacologic:
  - Honey
  - Cool mist vapor

References:

1. UpToDate Patient Education on Acute Bronchitis:
   https://www.uptodate.com/contents/acute-bronchitis-in-adults?search=acute%20bronchitis%20treatment&source=search_result&selectedTitle=1~107&usage_type=default&display_rank=1#H1532377120
2. UpToDate Algorithm for Diagnosis of Acute Bronchitis:
   https://pathways.uptodate.com/pathway/120412?source=related_link&search=acute%20bronchitis%20treatment&topicRef=6870&dl_node=5c8277a15adebb001043e06d&rid=603f6d9581d83f3d7810f28
   https://www.aafp.org/afp/2016/1001/p560.html