Clinical Policy: Critical Issues in the Management of Adult Patients Presenting to the Emergency Department With Community-Acquired Pneumonia (Executive Summary)

Approved for prerelease by the ACEP President April 14, 2020

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Background
This clinical policy from the American College of Emergency Physicians addresses key issues in the evaluation and management of adult patients presenting to the emergency department with community-acquired pneumonia. A writing subcommittee conducted a systematic review of the literature to derive evidence-based recommendations to answer the below critical questions. For each question, a systematic literature search was performed, evidence was graded and synthesized, and recommendations were made based on the strength of the available data. The background text, systematic review, and critical analysis of the literature will be published later this year in the Annals of Emergency Medicine.

1. In the adult ED patient diagnosed with community-acquired pneumonia, what clinical decision tools can be used to determine disposition?

Patient Management Recommendations

**Level A recommendations.** None specified.

**Level B recommendations.** Use the PSI or CURB-65 CAP decision tools to help identify low-risk patients who may be appropriate for outpatient treatment.

Use a CAP ICU-decision tools (such as the 2007 ‘IDSA/ATS Minor Criteria’) over PSI or CURB-65 to help identify high risk patients who may need ICU-level care.

**Level C recommendations.** Do not routinely use biomarkers to augment the performance of clinical decision tools to guide the disposition of emergency department patients with CAP.
Use CAP clinical decision tools in conjunction with physician clinical judgment in the context of each patient’s circumstances when making disposition decisions (Consensus recommendation).

2. In the adult ED patient with community-acquired pneumonia, what biomarkers can be used to direct initial antimicrobial therapy?

Patient Management Recommendations

- **Level A recommendations.** None specified.
- **Level B recommendations.** None specified.
- **Level C recommendations.** Do not rely upon any current laboratory test(s), such as procalcitonin and/or C-reactive protein, to distinguish a viral pathogen from a bacterial pathogen when deciding on administration of antimicrobials in ED patients who have community-acquired pneumonia.

3. In the adult ED patient diagnosed with community-acquired pneumonia, does a single dose of parenteral antibiotics in the ED followed by oral treatment versus oral treatment alone improve outcomes?

Patient Management Recommendations

- **Level A recommendations.** None specified.
- **Level B recommendations.** None specified.
- **Level C recommendations.** Given the lack of evidence, clinicians should determine whether or not to provide a single parenteral dose of antibiotics followed by oral treatment guided by individual patient risk profiles and preferences (Consensus recommendation).

Translation of Classes of Evidence to Recommendation Levels

Based on the strength of evidence grading for each critical question, the subcommittee drafted the recommendations and the supporting text synthesizing the evidence using the following guidelines:

- **Level A recommendations.** Generally accepted principles for patient care that reflect a high degree of clinical certainty (eg, based on evidence from 1 or more Class of Evidence I or multiple Class of Evidence II studies).
**Level B recommendations.** Recommendations for patient care that may identify a particular strategy or range of strategies that reflect moderate clinical certainty (eg, based on evidence from 1 or more Class of Evidence II studies or strong consensus of Class of Evidence III studies).

**Level C recommendations.** Recommendations for patient care that are based on evidence from Class of Evidence III studies or, in the absence of adequate published literature, based on expert consensus. In instances in which consensus recommendations are made, “consensus” is placed in parentheses at the end of the recommendation.