This issue of *EM Practice Guidelines Update* reviews 2 recently published guidelines on the diagnosis, treatment, and prevention of *Clostridium difficile* infection (CDI). The 2013 guidelines developed by the American College of Gastroenterology (ACG) and the 2014 guidelines developed by the European Society of Clinical Microbiology and Infectious Diseases (ESCMID) are intended to supplement the guidelines previously published by the Infectious Diseases Society of America in 2010 and the ESCMID in 2009.

The incidence of CDI has increased over the last decade, making it an important disease for emergency clinicians to be able to recognize and manage, as well as prevent.

**Practice Guideline Impact**

- Antibiotic stewardship is recommended to reduce the risk of CDI.
- Testing for CDI is generally indicated only for patients with diarrhea, and empiric treatment should be considered when there is a strong clinical suspicion for CDI.
- Nucleic acid amplification tests using polymerase chain reaction (PCR) testing for *C difficile* toxin genes are superior to enzyme immunoassay tests for toxins A and B.
- Patients with mild-to-moderate CDI should be treated with metronidazole 500 mg 3 times/day for 10 days, and severe CDI should be treated with oral vancomycin 125 mg 4 times/day for 10 days.
- Computed tomography (CT) of the abdomen is recommended only for patients with severe and complicated CDI.
- Patients with severe and complicated CDI should receive surgical consultation and a combination of oral, intravenous, and rectal therapy.
Introduction To The Guidelines: *Clostridium difficile* Infection

This issue of *EM Practice Guidelines Update* reviews 2 recently published guidelines on the diagnosis, treatment, and prevention of CDI:


CDI was first identified in 1978, but it has since become an increasingly common disease in the United States, especially over the last decade. CDI is spread by the oral-fecal route, and the increasing incidence of this infection can be attributed partly to widespread antibiotic use, increasing colonization in hospitalized patients, and the use of proton pump inhibitors. It is also now recognized that many comorbidities, including inflammatory bowel disease (IBD), immunosuppression (due to malignancies, organ transplants, and especially those taking chronic steroids), and pregnancy place patients at increased risk for CDI.

The ACG guideline provides clear, specific, and easy-to-implement recommendations based on current evidence. It provides specific definitions for mild-to-moderate, severe, and severe-complicated CDI. Mild disease is defined as CDI with diarrhea as the only symptom. Moderate CDI includes patients with diarrhea plus additional signs or symptoms that do not meet the severe or severe and complicated criteria. Severe CDI is characterized by a serum albumin level of < 3 g/dl plus either abdominal tenderness or a white blood cell (WBC) count of ≥ 15,000 cells/mm³. The definition of severe-complicated CDI includes at least one of the following characteristics: admission to an intensive care unit (ICU), hypotension with or without the use of vasopressors, temperature ≥ 38.5°C, ileus or abdominal distention, mental status changes, WBC levels ≥ 35,000 or < 2000 cells/mm³, lactate levels > 2.2 mmol/L, or end-organ damage. The guideline authors derived these definitions from several clinical severity scoring indices and highlight 3 risk factors for poor outcome: (1) abdominal distention, (2) elevated WBC, and (3) hypoalbuminemia. While clearly described, their definition of severe disease incorporates albumin level testing, which is not commonly ordered in the emergency department (ED).

The ESCMID guideline also has clear and concise guideline recommendations, and provides similar (but less specific) criteria for stratifying the severity of disease. It specifically defines an episode of CDI as having a clinical picture compatible with CDI and microbiological evidence of *C difficile* in the stool without another cause, or documented evidence of pseudomembranous colitis (information not usually available in the ED). With regard to severity stratification, the authors divided patients into either nonsevere or severe disease categories. Severe disease is defined as an episode of CDI with severe colitis or a complicated course of the disease, with significant systemic toxin effects and shock, resulting in admission to the intensive care unit (ICU), colectomy, or death. Signs and symptoms that correlate with severe disease are shown in Table 1. (See page 3.) Everything else is considered nonsevere disease. Their definition of severe CDI is similar to and overlaps with the severe and severe and complicated category in the ACG guidelines.

These guidelines are intended to supplement the guidelines previously published by the Infectious Diseases Society of America in 2010 and the ESCMID in 2009.3,4

—Seth Gemme, MD and Brian Clyne, MD
### Table 1. European Society Of Clinical Microbiology And Infectious Diseases Characteristics Of Severe *Clostridium difficile* Infection

<table>
<thead>
<tr>
<th>Category</th>
<th>Signs/Symptoms</th>
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| Physical examination            | • Fever (core body temperature > 38.5°C)  
• Rigors (uncontrollable shaking and a feeling of cold, followed by a rise in body temperature)  
• Hemodynamic instability, including signs of distributive shock  
• Respiratory failure requiring mechanical ventilation  
• Signs and symptoms of peritonitis  
• Signs and symptoms of colonic ileus  
• A mixture of blood with stools is rare in CDI and the correlation with severity of disease is uncertain |
| Laboratory investigations       | • Marked leukocytosis (leukocyte count > 15 x 10⁹/L)  
• Marked left shift (band neutrophils > 20% of leukocytes)  
• Rise in serum creatinine (> 50% above the baseline)  
• Elevated serum lactate (≥ 5 mmol/L)  
• Markedly reduced serum albumin (< 30 g/L) |
| Colonoscopy or sigmoidoscopy    | • Pseudomembranous colitis  
• There is insufficient knowledge on the correlation of endoscopic findings compatible with CDI (such as edema, erythema, friability, and ulceration) and the severity of disease |
| Imaging                         | • Distention of large intestine (> 6 cm in transverse width of colon)  
• Colonic wall thickening, including low-attenuation mural thickening  
• Pericolonic fat stranding  
• Ascites not explained by other causes  
• The correlation of haustral or mucosal thickening, including thumbprinting, pseudopolyps, and plaques, with severity of disease is unclear |

Abbreviation: CDI, *Clostridium difficile* infection.
Used with permission. The European Society of Clinical Microbiology and Infectious Diseases.
Assessment Of The Guideline Methodology

The ACG guideline development process is described on the ACG website rather than within the guideline itself. ACG used systematic reviews, where available, and used only primary research to create a recommendation, if a systematic review is not identified. In this guideline, the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) system was used to evaluate the quality of the evidence and grade recommendations, and is described in Table 2. The ESCMID guideline authors adapted the GRADE system for evaluating evidence and strength of recommendations, as described in Table 3.

The authors of this issue of EM Practice Guidelines Update, Seth Gemme, MD and Brian Clyne, MD, as well as Editor-in-Chief Sigrid Hahn, MD MPH, graded these guidelines using the Appraisal of Guidelines for Research and Education (AGREE) II instrument (available at http://www.agreetrust.org/). This instrument is a checklist that allows users to grade a guideline on 23 items in 6 domains, reflecting the degree to which the guideline developers used unbiased, best-practice methodology in developing the guideline and writing the recommendations. The results of the AGREE instrument are presented in Figure 1, with a percentile calculated for each domain (maximum of 100%). The score for relevance to emergency medicine is not part of the AGREE instrument, but reflects the judgment of the authors and editor of this issue.

—Seth Gemme, MD; Brian Clyne, MD; and Sigrid Hahn, MD MPH

Table 2. American College Of Gastroenterology Level Of Evidence And Strength Of Recommendation

<table>
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<tr>
<th>Level of Evidence</th>
<th>Description</th>
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<td>High</td>
<td>Further research is unlikely to change the confidence in the estimate of the effect</td>
</tr>
<tr>
<td>Moderate</td>
<td>Further research is likely to have an important impact and may change the estimate of the effect</td>
</tr>
<tr>
<td>Low</td>
<td>Further research is very likely to change the estimate</td>
</tr>
</tbody>
</table>

Classes of Recommendations

| Strong            | The evidence shows the benefit of the intervention or treatment clearly outweighs the risk |
| Conditional       | Uncertainty exists about the risk-benefit ratio |

Table 3. European Society of Clinical Microbiology and Infectious Diseases Level Of Evidence And Strength Of Recommendation

<table>
<thead>
<tr>
<th>Level of Evidence</th>
<th>Description</th>
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<tbody>
<tr>
<td>I</td>
<td>Evidence from at least 1 properly designed randomized controlled trial</td>
</tr>
<tr>
<td>II</td>
<td>Evidence from at least 1 well-designed clinical trial, without randomization, from cohort or case-control analytic studies; from multiple time series; or from dramatic results of uncontrolled experiments</td>
</tr>
<tr>
<td>III</td>
<td>Evidence from opinions of respected authorities, based on clinical experience, descriptive case studies, or reports of expert committees</td>
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</tbody>
</table>

Strength of Recommendation

| A                 | Strongly supports a recommendation for use |
| B                 | Moderately supports a recommendation for use |
| C                 | Marginally supports a recommendation for use |
| D                 | Supports a recommendation against use |
The recommendations excerpted here are presented as they appear in the original guidelines, including the strength of recommendation and the level of evidence. This review does not include all recommendations provided in the original documents published by the ACG and ESCMID. Instead, it includes those recommendations most pertinent to emergency clinicians. Recommendations from each guideline are presented side-by-side, where possible, to facilitate comparison. Where relevant, similarities and differences between these guidelines and the 2010 guidelines from the Infectious Diseases Society of America (IDSA) are described.

Note that when stratifying based on severity, the ACG used 3 categories: (1) mild-to-moderate, (2) severe, and (3) severe and complicated; the ESCMID used 2 categories: (1) nonsevere and (2) severe. For comparison, the ACG’s "severe" and "severe and complicated" categories are similar to the ESCMID’s "severe" category. Conditions falling outside of that category, according to ESCMID, are "nonsevere," which is similar to the "mild-to-moderate" category established by the ACG.

Diagnostic Tests For *C difficile* Infection By The American College Of Gastroenterology

- Only stools from patients with diarrhea should be tested for *C difficile* (strong recommendation, high-quality evidence).
- Nucleic acid amplification test (NAAT) for *C difficile* toxin genes, such as PCR, are superior to toxins A+B enzyme immunoassay (EIA) testing as a standard diagnostic test for CDI (strong recommendation, moderate-quality evidence).
- Repeat testing should be discouraged (strong recommendation, moderate-quality evidence).

Editorial Comment: Seth Gemme, MD and Brian Clyne, MD

Laboratory tests for *C difficile* have evolved rapidly in recent years, and it is important to know which test your laboratory is using. Several newer tests (NAATs and glutamate dehydrogenase [GDH] screening) are much more sensitive than toxins A+B EIAs that were previously held as the standard. In fact, the ACG guideline discourages repeat testing, because there is no evidence that this approach enhances the sensitivity of NAATs, and it is likely to result in false positives.

Generally, emergency clinicians will be testing for CDI in patients with diarrhea; however, there may be cases where clinical suspicion for CDI is high in patients with an ileus and no stool formation. Although this is not a formal recommendation in the ACG guideline, the authors do mention in the discussion that a rectal swab can be performed for patients with ileus. These patients should be tested with the GDH screen rather than a NAAT.
Management Of Mild-To-Moderate/Nonsevere *C difficile* Infection By The American College Of Gastroenterology

- If there is a strong pretest suspicion for CDI, empiric therapy for CDI should be considered, regardless of the laboratory testing result, as the negative predictive values for CDI are insufficiently high to exclude disease in these patients (strong recommendation, moderate-quality evidence).
- Any inciting antimicrobial agent(s) should be discontinued, if possible (strong recommendation, high-quality evidence).
- Patients with mild-to-moderate CDI should be treated with metronidazole 500 mg orally 3 times/day for 10 days (strong recommendation, high-quality evidence).
- For mild-to-moderate CDI in patients who are intolerant or allergic to metronidazole and for pregnant/breastfeeding women, vancomycin should be used at standard dosing (strong recommendation, high-quality evidence).
- In patients in whom oral antibiotics cannot reach a segment of colon (such as occurs with Hartman’s pouch, ileostomy, or colon diversion), vancomycin therapy delivered via enema should be added to the treatments above until the patient improves (conditional recommendation, low-quality evidence).
- The use of antiperistaltic agents to control diarrhea from confirmed or suspected CDI should be limited or avoided, as they may obscure symptoms and precipitate complicated disease. Use of antiperistaltic agents in the setting of CDI must always be accompanied by medical therapy for CDI (strong recommendation, low-quality evidence).

Management Of Nonsevere *C difficile* Infection By The European Society Of Clinical Microbiology And Infectious Diseases

- In nonepidemic situations and with (nonsevere) CDI clearly induced by the use of antibiotics, it may be acceptable to stop the inducing antibiotic and observe the clinical response for 48 hours, but patients must be followed very closely for any signs of clinical deterioration and placed on therapy immediately if this occurs (C-II).
- Metronidazole orally 500 mg 3 times daily for 10 days (A-I).
- Vancomycin orally 125 mg 4 times daily for 10 days (B-I).
- Fidaxomicin orally 200 mg twice daily for 10 days (B-I).
- When oral administration is not possible: intravenous metronidazole 500 mg 3 times daily for 10 days (A-II).

Editorial Comment: Seth Gemme, MD and Brian Clyne, MD

A common clinical decision faced by emergency clinicians is whether or not to treat empirically for CDI versus waiting for laboratory confirmation. Confirmatory testing for CDI cannot be performed rapidly and results are often not available during an ED visit. This recommendation encourages empiric treatment for patients with high likelihood of CDI.

Oral metronidazole is considered first-line therapy for mild-to-moderate disease. Metronidazole is as effective as vancomycin and less expensive (approximately $2/day vs $71 to $143/day for oral vancomycin). One difference between these guidelines is that ESCMID gives a moderately strong recommendation for the use of the newly approved drug, fidaxomicin. The ACG guideline, in contrast, urges caution, citing a lack of evidence of superiority and also noting the high cost of fidaxomicin when compared with metronidazole and vancomycin.

Interestingly, for nonsevere CDI, the ESCMID guideline marginally recommends an observation strategy where the inducing antibiotic is stopped and the clinical response is observed for 48 hours, in an effort to determine whether patients resolve after discontinuation of the inducing antibiotic. However, this is not based on high-quality evidence. It may difficult for an emergency clinician to discharge a patient with possible CDI without treatment, especially when follow-up may be in question.
Management Of Severe And Severe And Complicated *C difficile* Infection By The American College of Gastroenterology

- Patients with severe CDI should be treated with vancomycin 125 mg 4 times daily for 10 days (conditional recommendation, moderate-quality evidence).
- Supportive care should be delivered to all patients and includes intravenous fluid resuscitation, electrolyte replacement, and pharmacological venous thromboembolism prophylaxis. Furthermore, in the absence of ileus or significant abdominal distention, oral or enteral feeding should be continued (conditional recommendation, low-quality evidence).
- Computed tomographic scanning of the abdomen and pelvis is recommended in patients with complicated CDI (conditional recommendation, low-quality evidence).
- Vancomycin delivered orally (125 mg 4 times/day) plus intravenous metronidazole (500 mg 3 times/day) is the treatment of choice in patients with severe and complicated CDI who have no significant abdominal distention (strong recommendation, low-quality evidence).
- Vancomycin delivered orally (500 mg 4 times/day) and per rectum (500 mg in a volume of 500 mL 4 times/day) plus intravenous metronidazole (500 mg 3 times/day) is the treatment of choice for patients with complicated CDI with ileus or toxic colon and/or significant abdominal distention (strong recommendation, low-quality evidence).
- Surgical consult should be obtained in all patients with complicated CDI. Surgical therapy should be considered in patients with any of the following attributed to CDI: hypotension requiring vasopressor therapy; clinical signs of sepsis and organ dysfunction (renal and pulmonary); mental status changes; WBC count ≥ 50,000 cells/mCL, lactate ≥ 5 mmol/L; or complicated CDI with failure to improve on medical therapy after 5 days (strong recommendation, moderate-quality evidence).

Management Of Severe *C difficile* Infection By The European Society Of Clinical Microbiology And Infectious Diseases

- There is no evidence that supports the use of fidaxomicin in life-threatening CDI (D-III).
- The use of oral metronidazole in severe CDI or life-threatening disease is strongly discouraged (D-I).
- When oral administration is not possible: intravenous metronidazole 500 mg 3 times daily for 10 days (A-II) combined with vancomycin retention enema 500 mg in 100 mL normal saline 4 times daily intracolonic, or combined with vancomycin 500 mg 4 times daily by oral/nasogastric tube for 10 days (B-III).

Editorial Comment: Seth Gemme, MD and Brian Clyne, MD

The ACG and ESCMID definitions of severe disease are reviewed on pages 2 and 3. (See the Introduction section.) The ACG guideline recommends the use of intravenous metronidazole in addition to oral vancomycin in all patients with severe and complicated disease. The ESCMID, in contrast, only recommends intravenous metronidazole in patients unable to take oral medications (in combination with a vancomycin enema or vancomycin via nasogastric tube). The addition of the vancomycin enema for patients with an ileus or toxic colitis (reflected by significant abdominal distention) or for those who cannot take oral medications, will more reliably allow for medications to reach the colon.

Acknowledging the low-quality evidence that exists, the ACG authors recommend CT imaging for patients with complicated CDI to determine the extent of disease and to identify megacolon, perforation, or ileus. Based on their criteria for severe and complicated CDI, this is an appropriate recommendation and is consistent with current practice for emergency clinicians. The ESCMID guidelines do not provide recommendations for imaging in CDI. However, the (continued on page 8) ESCMID guideline calls for surgical treatment of perforation of the colon, toxic megacolon, and ileus—all of which might be diagnosed with CT imaging.

Because surgery is of benefit for the sickest patients with CDI, and earlier colectomy is associated with a lower mortality, the ACG guideline outlines specific criteria that should prompt a surgical consult. This provides the emergency clinician with objective means to determine which patients should be considered for surgical intervention.
Management Of Recurrent C difficile Infection By The American College Of Gastroenterology

- The first recurrence of CDI can be treated with the same regimen that was used for the initial episode. If severe, however, vancomycin should be used. The second recurrence should be treated with a pulsed vancomycin regimen (conditional recommendation, low-quality evidence).
- There is limited evidence for the use of adjunct probiotics to decrease recurrences in patients with recurrent CDI (moderate recommendation, moderate-quality evidence).

Management Of First Recurrence Of C difficile Infection By The European Society Of Clinical Microbiology And Infectious Diseases

- Fidaxomicin orally 200 mg twice daily for 10 days (B-I)
- Vancomycin orally 125 mg 4 times daily for 10 days (B-I)
- Metronidazole orally 500 mg 3 times daily for 10 days (C-I)

Editorial Comment: Seth Gemme, MD and Brian Clyne, MD

The authors describe the relatively high rate of recurrent CDI (10% to 20% within 8 weeks of treatment). The risk of a second recurrence of CDI is nearly 50%, either from the same strain or a different strain of C difficile. Knowledge of treatment guidelines for recurrent cases of CDI is especially relevant to emergency clinicians because many of these patients will present to the ED.

Similar to patients with an initial episode of CDI, patients with recurrence must be risk-stratified prior to selecting treatment. Treating the first mild-to-moderate recurrence with the same antibiotic may leave emergency clinicians feeling uneasy for fear of resistance. The ESC-MID guideline recommends treatment of the first recurrence with either fidaxomicin orally at 200 mg twice a day for 10 days, vancomycin orally at 125 mg 4 times daily for 10 days, or metronidazole orally at 500 mg 3 times daily for 10 days. They do not specify if the antibiotic choice should differ from initial management.

Complete recommendations for second and third recurrences are not presented here in the interest of brevity. Although not a treatment option in the ED, it is interesting to note that fecal microbial transplant is an option, wherein fecal flora from a healthy donor are transferred to the colon of the patient with CDI. Very high cure rates (> 90%) for recurrent CDI have been shown in studies to date. Further studies of this approach are ongoing.
Management Of C difficile Infection And Comorbid Conditions By The American College Of Gastroenterology

- All patients with IBD hospitalized with a disease flare should undergo testing for CDI (strong recommendation, high-quality evidence).
- In patients who have IBD with severe colitis, simultaneous initiation of empirical therapy directed against CDI and treatment of an IBD flare may be required while awaiting results of C difficile testing (conditional recommendation, low-quality evidence).
- Any diarrheal illness in women who are pregnant or periparturient should prompt testing for C difficile (conditional recommendation; low-quality evidence).

Editorial Comment: Seth Gemme, MD And Brian Clyne, MD
Several patient groups are at higher risk for acquiring CDI or having worse outcomes, including patients with IBD, chronic liver disease, organ transplants, or malignancies (especially if undergoing chemotherapy), those taking chronic steroids, or pregnant women and women in the peripartum period. Because it can be difficult to distinguish symptoms of CDI from an IBD flare, concomitant treatment may be warranted for patients with severe colitis pending confirmatory testing.

Infection Control And Prevention By The American College Of Gastroenterology

- Antibiotic stewardship is recommended to reduce the risk of CDI (strong recommendation, high-quality evidence).
- Contact precautions for a patient with CDI should be maintained at a minimum until the resolution of diarrhea (strong recommendation, high-quality evidence).
- Patients with known or suspected CDI should be placed in a private room or in a room with another patient with documented CDI (strong recommendation, high-quality evidence).
- Hand hygiene and barrier precautions, including gloves and gowns, should be used by all healthcare workers and visitors entering the room of any patient with known or suspected CDI (strong recommendation, moderate-quality evidence).

- Disinfection of environmental surfaces is recommended using a United States Environmental Protection Agency-registered disinfectant with C difficile-sporicidal label claim or 5000 ppm chlorine-containing cleaning agents in areas of potential contamination by C difficile. (strong recommendation, high-quality evidence).
- Although there is moderate evidence that 2 probiotics (Lactobacillus rhamnosus GG and Saccharomyces boulardii) decrease the incidence of antibiotic-associated diarrhea, there is insufficient evidence that probiotics prevent C difficile infection (strong recommendation, low-quality evidence).

Editorial Comment: Seth Gemme, MD And Brian Clyne, MD
In the ED setting, it is difficult to predict who may have CDI at the time of triage, and many patients subsequently diagnosed with CDI are not placed on isolation precautions. It would be optimal to isolate all diarrhea patients at the onset of care in the ED to prevent the spread of CDI; however, this approach would be logistically challenging. While acknowledging the pressures of crowding, isolating patients with CDI should be a priority.

The authors cite clindamycin, cephalosporins, and fluoroquinolones as antibiotics associated with the greatest risk for CDI. Through selective antibiotic use, one institution decreased CDI incidence by 60%.

It is important to remember that C difficile spores cannot be reduced by alcohol-based hand hygiene. The authors note that hand washing with soap and water is recommended, but cite a study that showed better disinfection with the use of a chlorhexidine antiseptic.
References


CME Questions
To take the CME test, visit: www.ebmedicine.net/G0314 or scan the QR code below with a smartphone:

1. A 56-year-old man is diagnosed with CDI for the first time. His physical examination is normal and his WBC count is 13,000 cells/mm³. What is the most appropriate treatment?
   a. Metronidazole 500 mg orally 3 times/day for 10 days
   b. Vancomycin 500 mg orally 4 times/day for 10 days
   c. Vancomycin 500 mg orally 4 times/day and metronidazole 500 mg intravenously 3 times/day for 10 days
   d. Metronidazole 500 mg intravenously every 8 hours for 10 days

2. Which of the following patient characteristics stratifies a patient with CDI into the "severe and complicated" disease category as defined by the ACG?
   a. Fever ≥ 38.5°C
   b. Serum lactate of > 2.2 mmol/L
   c. WBC of ≥ 35,000 or < 2000 cells/mm³
   d. Any of the above

3. A 60-year-old man presents 2 weeks after completing oral metronidazole therapy for his first mild-to-moderate CDI and is found to have a recurrent CDI. What treatment should be instituted if he is again classified as mild-to-moderate severity?
   a. Vancomycin 125 mg orally 4 times/day for 14 days
   b. Metronidazole 500 mg intravenously 3 times/day for 10 days
   c. Metronidazole 500 mg orally 3 times/day for 10 days
   d. Vancomycin 500 mg orally 4 times/day and metronidazole 500 mg intravenously 3 times/day for 10 days
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**Target Audience:** This enduring material is designed for emergency medicine physicians, physician assistants, nurse practitioners, and residents.

**Objectives**
- Upon completion of this article, you should be able to: (1) stratify and treat CDI patients by severity, given clinical and laboratory findings; (2) describe the most accurate test to diagnose CDI; and (3) identify methods to prevent spread of CDI.

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<td>Current Guidelines For Evaluating And Managing Symptomatic Early Pregnancy In The ED</td>
<td><a href="http://www.ebmedicine.net/EarlyPregnancy">www.ebmedicine.net/EarlyPregnancy</a></td>
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<td>January 2013</td>
<td>Current Guideline For The Neurodiagnostic Evaluation Of The Child With A Simple Febrile Seizure</td>
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<td>February 2013</td>
<td>Current Guidelines For The Evaluation And Management Of Community-Acquired Pneumonia In The ED</td>
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<td>March 2013</td>
<td>Current Guidelines For Management Of Bell Palsy And Herpes Zoster In The ED</td>
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<td>April 2013</td>
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<td>May 2013</td>
<td>Current Guidelines For The Management Of Community-Acquired Pneumonia In Children</td>
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<td>June 2013</td>
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<td>July 2013</td>
<td>Guidelines For The Evaluation And Management Of Acute Cerebrovascular Syndrome Part I: Diagnosis And Evaluation Of Transient Ischemic Attack (Stroke CME)</td>
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<td>September 2013</td>
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<td>Jan/Feb 2014</td>
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